

Digitized by the Internet Archive in 2008 with funding from Microsoft Corporation





# THE NERVOUS LIFE

#### BY

## G. E. PARTRIDGE, Ph.D.

Formerly Lecturer in Clark University Author of "An Outline of Individual Study



Hew York
STURGIS & WALTON
COMPANY
1911

All rights reserved



# Copyright 1911 By STURGIS & WALTON COMPANY

Set up and electrotyped. Published March, 1911

RC 351 P3

### PREFACE

By the nervous life, as the term is used in this book, is meant two conditions: first, the nervous social and industrial life, best typified by the stress and strife of our great cities; second, the nervous life as expressed in the temperament of the nervous individual. Both these elements of the nervous life are on the increase, and each acts upon and produces the other. We have yet to learn the full significance of these conditions, and how to live in the midst of them without suffering as a nation from impaired nervous forces, and without transmitting evils to future generations.

So the problem of the nervous life is before us, especially in America, as at no other time in history. It must be studied from every point of view: social, psychological, ethical, and medical, until we have a medical practice, a preventive hygiene, and an educational system, capable of controlling the situation.

The purpose of this book is to point out some

of the causes and conditions of the nervous life. especially those that appear to be psychological, and to suggest the principles of control upon which an hygienic regimen must be based. These principles are then applied to several problems of mental and physical hygiene, it is hoped in a way to help anyone interested in his personal problem. It is not the intention to discuss nervous disorders, and what is said is addressed to the well rather than to the sick. It seems true, however, that the principles of living are not different for well and ill; that the same thoughts apply to getting well as to staying well. Indeed it is urged that this truth is not sufficiently understood, and that the treatment of the sick and the delicate is too often unnatural and narrow.

The sources of help in preparing these pages are so many that they cannot all be acknowledged. The point of view being essentially psychological, aid has been obtained from the psychological writers; and it has been assumed that many of the results of the new psychology are now applicable to the practical life in general, and to the individual. For what is more nearly related to the medical aspects of the sub-

ject, debt is owed to the writings and oral teachings of several specialists. Here and there the reader will not fail to detect the influence of recent writings of American teachers of philosophy. For going thus far afield for help in our problem no defence is offered, except to say that, if the condition is rooted in the very heart of our national life, and indeed of all social progress, as is maintained, the cure must be as profound and broad as the disease. One must see that we are, indeed, confronted by the whole problem of education: education which includes the general question of mental and nervous hygiene, and also the personal problem of each individual.

It is hoped that at least one truth will be impressed upon all: that is, the duty which everyone owes to society and to himself to study well his own personal problem, so that he can learn to do most effectively the work that falls to his lot. This is a time when everyone, whether well or ill, must produce something of social value, if he is to lead a normal life. No one can escape this task. And no one can escape contending with those forces which threaten to destroy him while he works. But

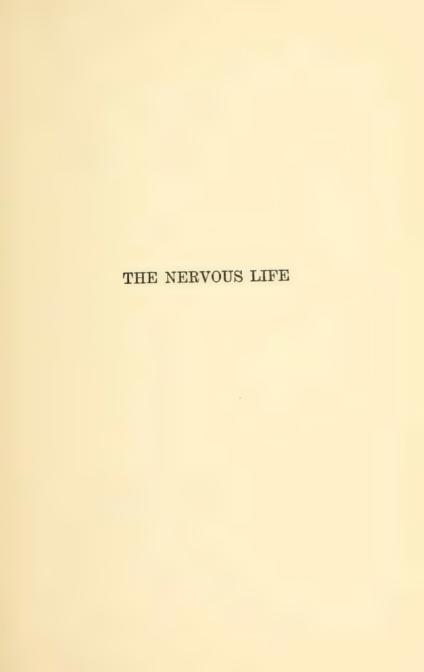
each must cope with them in his own way. To do this, he must know his own resources and learn to control them wisely. It is to this personal problem, the problem of the individual, that something definitely helpful, it is hoped, is contributed by this book.

G. E. PARTRIDGE.

## CONTENTS

CHAPTER	:										P	AGE
1	Introduction	τ.									0	3
II	SOME BIOLOG	ICAL	LAW	s.			٠			٠		9
III	SELF-KNOWLE	EDGE					٠	٠				19
IV	THE NERVOUS	s LIF	E OF	THI	e In	DIV	DU.	AL				33
V	A SUMMARY											47
VI	PRINCIPLES C	F Co	NTRO	L.								53
VII	THE OPTIMU	M LI	FE .									59
VIII	THE PRACTIC	AL P	ROBL	EM						٠		65
IX	FOOD											69
X	THE SKIN .							۰	۰			87
XI	EXERCISE .						٠					97
XII	SLEEP AND F	EST										117
XIII	Work				٠.	٠						129
XIV	RECREATION											139
XV	Тне Емотю	NS								۰		153
XVI	THE INTELLE	CT									٠	171
XVII	Suggestion .	AND	MEN	TAL	HE	LIN	ſĠ		٠			179
XVIII	THE WIDER V	<b>VIEW</b>										201







## THE NERVOUS LIFE

#### CHAPTER I

#### INTRODUCTION

We are often told that our national life is nervous and abnormal, that we are too eager and too hard-working; that, indeed, we are the most nervous people in the world, and even are on the road to destruction. There must be some truth in the charge. It is useless to repeat facts and arguments. It is quite likely that we differ less from other nations than is sometimes believed, but it seems true that nowhere else is there such an eager rush from country to city, from the simple to the complex life. And nowhere do the ideals of the city so completely captivate the imagination of the young.

From such ideals inevitable results follow: some good, some bad. Selection and competi-

tion become severe. New habits of life are made necessary. New types of temperament arise, as a result of selection. Sanitariums multiply to care for those who fail to conform to the conditions under which they live, or are too weak to bear the strain. Nerve specialists thrive. New and strange cults and health systems spring up. Now and then we become thoroughly alarmed, and at least give attention to someone crying, *Back to Nature!* But we do not go back to nature nor stem the current from country to city.

This picture, especially in its dark and melancholy features, is so often held up to us, that we need not linger upon the details. Whether or not the dangers of modern life are so great as many think, we must admit that we live in a time of great nervous stress; when we are not, as a nation, entirely adapted, either mentally or physically, to new modes of life. We suffer from the effects of strain. Our ideas and ideals demand more of us than we are equipped to bear. What shall we do? Must ideals be abandoned until bodies and minds are better able to bear strain, and fewer lives will be endangered? Or must we learn how to

adapt ourselves to the demands of the ideals? Whatever society as a whole, through its leaders, may do, it is certainly true that few of us can modify to any great extent the course of these movements in civilisation, if they can be changed at all. But everyone can at least try to understand the meaning of the stress of modern life, and determine in part his own place. He can study his own forces, estimate the dangers to be run, and the values at stake, and make provision for his own welfare. This is the personal or individual problem which everyone must in some way solve, unless life is to be lived at random.

If one wishes to understand the nervous life, he must have some knowledge of the biological laws according to which life has developed. He must know something about the principles of social evolution, about facts and laws of physiology and psychology. For only in this way can one understand the changes that are taking place in the human species, and in ideals; how types are changing as new conditions arise, demanding new modes of conduct, and new abilities. One must know, too, what the effects of the nervous life are upon body and mind,

what the mental and physical components of this life are, what resources are at hand to counteract these effects, if necessary; how the individual can keep his balance in the confusion that surrounds him, and control or cure, if need be, the disorders that arise in himself to limit his usefulness and comfort.

Many questions arise when one begins to examine the nervous life in this way. What, for example, is the meaning or purpose of this movement in civilisation, which seems to accomplish so much, and yet destroys so many lives and causes such sufferings? Are we all moving toward some inevitable fate? Or is it all a mistake on the part of man, a lack of foresight, a selfishness, the product of wrong ideals, which man must abandon? Or, again, is there a normal progress beyond the control of man to which he must yield; which he must, perhaps, in some ways hold in check, and to which he must adapt himself by wisdom and self control? Or, finally, is the situation as a whole entirely unintelligible to us, so that the best one can do is to look to his own health and safety, get all the good he can, avoid the evil, and, at the worst, flee from it, and take refuge in the simple life of nature?

If one believes that the course of events is a true progress, and that there is a fight on, worth taking part in, and decides to stay, many other more personal questions arise. How can one fortify himself for the attack? How can one understand his own resources, and direct them so as to get most in return for his labour; how counteract the effects of bad heredity, or the misfortunes of childhood; how prevent breakdown, and failure?

Many other questions press for answer, to which wholly satisfactory answers will not be likely to be found. But if a few principles are seen clearly, one may at least be put into a better position than before to study the nervous life for himself, and to attack his own personal problem to better advantage. The day has come, when we can no longer go to the doctor to be cured of all our ills. Ills have multiplied faster than the doctors' medicines: and personalities have grown so varied and complex that everyone must to a certain extent work out his own salvation. It is indeed in the most inti-

mate and personal parts of one's life, where neither physician nor other outsider can be competent to advise, that the most pressing of personal problems are to be found, and the best work of self study can be done.

### CHAPTER II

#### SOME BIOLOGICAL LAWS

In searching for the causes of the nervous life, one must look beyond the lives of individuals, and their social activities and ideals, to the laws of progress and decay in civilisation as a whole; indeed it will be necessary to observe the most general laws of animal evolution, if one wishes to reach the bottom of the problem.

Two principles of growth will readily be discovered, which seem at once likely to be connected with the evils of the modern nervous life. They will be seen to be normal and necessary modes of progress, and yet to be the direct causes of conditions of which we so bitterly complain: conditions which, indeed, some think indicate the speedy degeneration of the whole human race.

These principles can be called (1) The principle of increasing mentality; and (2) The principle of increasing individuation. These terms

of themselves tell little, but their meaning for the mental life can very easily be indicated.

Early in animal life, or as a factor in producing it, the quality of irritability of tissues seems to have been brought forward and to have been favoured by selection. Chemical compounds, already highly excitable, unstable, and complex, became increasingly so in forming the nervous system. The delicacy of balance, the intricacy of these compounds, have increased as activity has become more complex, and mind has become dominant in the world. Mind appears as effort, ideas, and ideals, setting tasks for the body to accomplish, and conditions to which the body must adapt itself. Accompanying the increasing active powers of mind, or rather lagging behind them, come powers of voluntary control and of direction of energies. With increasing intensity of life comes instinctive craving for, and means of producing, states of high intensity of consciousness, at first crude and emotional, but finally purposeful and sustained. These are added to man's equipment for making progress, but they also add to the stress and strain of life.

This intensity-craving has shown itself in

many forms in the life of man. It has appeared in the quality of his ideals, which more and more stretch beyond the possibilities of the present, and put the mind upon tension; it has been shown in many ways in the social relations, in religious practices, in the craving for physical intoxications, in a highly developed and widely irradiated sexual life—all making for progress, richness of experience, and a life more abundant.

Everywhere in times of greatest progress, when the race has seemed to be emerging into a new stage of existence, such intoxication impulses seem to have increased in intensity. Times of great excitability and intensity and of imperfect control have always preceded great controlled activities. This is illustrated in ancient history by the periods of progress in culture in Greece, and later by the Renaissance in Europe. The same characteristics can be seen in our national life to-day. There is high intensity, ideals far in advance of achievement, strain, rapidly unfolding powers, imperfect control.

In the life of any growing individual, similar periods can be detected, governed by the same

laws of progress. Periods of craving for intensity, of unfolding power and imperfect control, precede periods of greatest achievement and directed effort.

Accompanying the strain and pressure, incident to this mode of progress, an increasing number of abnormal individuals and of those having imperfect control, and the prevalence of powers partially controlled, would be expected. As a nation we are now in the condition of such imperfect command of our rapidly acquired powers. The number of individuals who cannot bear, without disaster, the strain of this life has increased rapidly in recent years, and will probably continue to increase. This is the inevitable price of progress by selection. Parts must degenerate that the whole, or main current, may go forward. Yet the whole movement cannot be said to be abnormal, unless life itself is a disease.

Of course so simple a statement of a biological law, when applied to human society, expresses but a part of the truth. We are no longer subject to the crude selection which eliminates the unfit among animals. We protect the weak, guard against each new evil as

it arises, cure and care for the sick. But the principle is the same in all essentials. Victims must be the price of strenuous effort to attain ideals.

Another cause of nerve strain in modern life. deeply embedded in the laws of progress of the race, is the increasing individuation that accompanies all social advancement. In the higher species, as compared with the lower, variability is greater. There are more kinds of individuals; they become more and more unlike one another. There is finally specialisation of labour, temperaments become dissimilar, and while co-operation is increased in some ways, individuals become estranged from one another. Social life is more complex, experiences more heterogeneous, it is harder for the individual to bring his experiences into order, and it becomes more and more necessary for each to direct his own life. Individuals are, therefore, isolated from one another, each must stand more for himself, working out his own problems without those social sanctions that aid when great numbers are doing the same thing in much the same way. Interests and activities are intense along a few definite lines, many interests must be suppressed in order to enhance the efficiency of the rest, and that all-round growth which knits up the fragments of experience into a true personality is more difficult to attain. The unused parts of the mind readily become sources of disorder. All these conditions invite ills of the nervous life. They are the result, it is true, of progress, which is normal, if life itself is normal, yet they bring disaster to many.

But we cannot for these reasons reverse the process of evolution, and return to a life of nature. One who tries to do so fails to understand the meaning of civilisation. Evils must be met, compensated, and removed as best we can, and individuals must be protected from harm by all the resources of science and of education; but it is not in the power of any individual nor of any nation to stem the tide of progress; and to withdraw from the struggle, if it were possible, would be to live an abnormal life.

Such a view of social evolution gives us at once a conception of the nervous life of the individual, that ought to prevent the narrow theories of the control and cure of nervous disorders that are now so prevalent. The nervously weak and ill-balanced suffer from the effects of social progress, from the selection of certain types of mind and body, suited to carry on the work of the world. We all live in the midst of stress and excitement. Some thrive, others cannot bear the strain. The remedy seems to suggest itself. The weak must be sheltered from the intensity and individuation of the struggle for existence, to the extent necessary so that they can lead normal lives. They must be studied and understood, not as diseased bodies, but as variations from the average, needing special care. However painful the condition of the individual may be, or complete the failure, or self-caused the misfortune may seem, one may know that, in part at least, his failure is a portion of the service which, as an individual, he performs for the whole. One cause of his failure is the need of the race for setting high ideals, and striving strenuously to attain them. He suffers that the race may gain, and his condition itself must be accepted as a contribution to the welfare of the race—which, however, he must still further serve.

On the other hand, public hygiene becomes a greater problem. Not only must the individual be understood and protected, but the habits and institutions of society must be made to compensate and check the evils which civilisation brings. Co-operation must increase, to offset the increasing individuation of the parts, there must be legislation against unhygienic living, against too long hours of labour, against oppression by power. Sanitary conditions must be studied, with special reference to nervous health, provision must be made for the recreational life of the people.

Such measures, it is plain, are being taken more or less everywhere, and on all hands are evidences that mind is creating the means of holding in check and curing the evils which it creates. We change in many details the course of these evils and compensations, now keeping the resources of control a little nearer the need, and now, by negligence, or ignorance, letting evils gain a little more the upper hand. But the course of progress we cannot change, in any essential, and it is futile to try. The causes of modern ills of the nervous life are part and parcel of the order of events, and the

best that can be done is to accept the situation and control it as best we can.

Of course so general a discussion of these principles goes but a little way toward solving the practical problems of society and of the individuals in it, but it can at least prevent narrow conclusions about the nature of the nervous life, and the dangers it has brought into human society.

#### SUGGESTIONS FOR READING.

The best way to obtain a point of view for studying the problems of the nervous life is to read the theory of evolution. For this, there is no better way than to go back to the original sources, and become acquainted with the writings of that great scientist, Charles Darwin. His books, the Descent of Man, and the Origin of Species, are not difficult to read, and they contain the foundation of all our present evolutionary thought. Spencer's more philosophic writings are more difficult, but it will repay anyone to look into the work of this writer.

After preliminary reading of this kind, one will be in a position to follow out special problems, or to see how any problem, such as that of

the nervous life, must be attacked from the evolutionary standpoint. Read, for example, Chamberlain's *The Child*, and see how the past enters into every phase of the growing life of the child; how present condition of mind and body can be explained by reference to the past.

Haeckel's writings will interest those who wish to look into biological theories, and to follow out the history of man on the globe. Shute's First Book in Organic Evolution, and Tylor's Primitive Culture will show the place of civilised man in the scheme of nature. Sutherland's work, the Evolution of Morals, is also full of interest for anyone willing to read seriously about the subject of evolution.

## CHAPTER III

#### SELF-KNOWLEDGE

WE have made out that one inevitable result or condition of social progress is increased individuation. That is, individuals become more unlike one another, and new types are formed. The relations among individuals become more complex and varied. We have less knowledge, relatively, about those with whom we associate, as they become more unlike ourselves, and because self-knowledge is in part derived from knowledge about those who are similar to ourselves and for other reasons, self-knowledge becomes relatively less as social complexity increases. Occupations multiply, it is more difficult to adjust the individual to his proper sphere of work. And yet the more highly specialised, the more sensitised the organism, the greater the need of precise adjustment to the conditions of life—the greater the disaster when adjustment is not made.

All such facts show that there is an increas-

ing need of attention to the personal problem of each individual. Each must study his own nature, and he must know better the nature of those whom it is his lot as teacher, parent, or physician to advise and control. Every child must be known as an individual by those who direct the first years of his life, and he must be helped to understand himself, so that, when he takes the direction of his life into his own hands, he may be equipped with self-knowledge. When he chooses his calling in life, when he shapes his ideals and habits, he should do so with knowledge of his abilities and traits of temperament far greater than now most people possess.

It seems as though everyone must admit that far too little attention is given to this all-important subject. Neither school nor home, as a rule, undertakes to understand the child thoroughly, and many children grow up strangers to parent, teachers, and to themselves. Though great advances have been made in general knowledge of human nature, application of this knowledge to the problems of the individual is still not made. Few understand themselves well at those times of life when self-

knowledge is so essential, and few know well the nature of those whose lives they try to direct. But this state of affairs need not be a cause of great reproach to science. It is quite in keeping with the order of development of the sciences that knowledge about the most commonplace and intimate experiences is the last to become scientific. We see already a widespread interest in the problems of the individual life, and light is coming from many quarters.

And yet, it must be emphatically repeated, the most erroneous opinions about individuality still prevail, even among the educated classes. Little is taught in the school in the way of self-knowledge. Children are dealt with in groups, and thus many unfortunate careers are allowed to shape themselves toward evil, when a little moulding of the character in early years might prevent them going wrong, if teacher or parent knew how to observe and interpret the most obvious facts about the individuality of children.

There can be no well ordered self-knowledge without the knowledge of at least some of the elementary facts of general physiology and psychology. It is by studying one's life prob-

lem with reference to the general laws of human nature, and by comparison of the one with the many, that one comes to know any individual, be it self or other. Inasmuch as this is one of the most important undertakings one can ever enter upon, it will pay to give some attention to it.

There are three great groups of facts about the self, which, for purposes of description may be sharply separated from one another, though, in actual life, they are inter-connected in the most intricate manner.

(1) Everyone has a history, a past. He has a series of connected experiences, all belonging to, or making up, the self. It is by wisdom gained from remembering and interpreting the past that one guides his future. But directing the future by the past varies vastly among human beings, not only in the intelligence, but in regard to the sincerity with which the experiences are dealt with. So complex and full of possibilities is the study of one's past that it can safely be said that no one has ever succeeded in completely understanding his own experiences, or in profiting by them as he might.

On superficial view one's past seems a series

of more or less disconnected events, the happenings of early childhood often appearing to belong to a different personality, from those of the adult life. But as these events are studied more closely, facts seem to fit into their places, the present becomes explained by the past, and the future can be predicted or planned. We often discover that by-gone events still influence us greatly, too often harmfully, and usually so in proportion to our failure to understand them and interpret their true meaning, as related to our life as a whole. Study of any life will disclose a great variety of unutilised experiences, and in some it must appear that everything of value has gone to waste. Emotional faults have been allowed to grow out of experiences that should have been turned to advantage; unsuppressed, useless interests divide the attention with the useful. A still broader survey of experience will show how, sometimes in spite of the individual, the past has been utilised; how the apparently disconnected experiences have been marshalled together in a way, to understand which, must strengthen one's belief in the reason and order guiding daily life from without.

We are often told to look ahead and not backward, but more intelligent advice is that we look wisely backward at all times. Everyone would profit by a patient study of the meaning of the events of his own life, from the earliest childhood he can remember. In a sense the task of constructing one's autobiography is an essential part of education—for in this way alone can one understand himself, and others. One who lives under conditions of strain, with strength doubtfully equal to his tasks, must of necessity become a self student. He must learn to look backward intelligently, for he cannot afford to neglect so great a resource for keeping a true balance. He must make his past yield the utmost of wisdom for the future—and, in order to do this, he must first of all understand it.

(2) Considered from another point of view, each individual is an organism or community of parts, mental and physical, each part variable from one individual to another. The sum of these parts we call the personality, character, temperament, self. Some of these characteristics are inherited, some are the product

of mixture or struggle of hereditary tendencies, some are acquired. Some are unalterable, some may easily be changed.

We learn about these traits for the most part by personal experience, which is sometimes a wasteful method, and certainly few learn enough about their own abilities, virtues, and faults to guide conduct without many trials and errors. It seems as though we might do better in teaching the young to understand themselves. There are times when there is a craving for this kind of self-knowledge. Children are eager to compare themselves with others, and this interest might be turned to more practical use. At adolescence the craving for selfknowledge sometimes becomes a passion, and then failure to satisfy it is almost an educational crime.

Yet in spite of this natural interest in self, many grow up with but little true knowledge of their own characteristics, and many seem never to become acquainted with themselves at all. Some are not willing to face the problem honestly, and to make unprejudiced estimates of themselves. Some seem afraid of self-knowl-

edge, some grow to regard themselves as eccentric and abnormal, when a little knowledge of human nature would dispel the belief.

It is difficult to make practical suggestions for the analysis of the self. Language gives us perhaps the best entrance to the problem. Human traits have always been of supreme interest to everyone, because success, comfort, and safety depend upon knowledge about those with whom we associate. All languages are rich in terms describing the traits of human nature. So one may begin a psychological analysis of any individual, self or other, by collecting all the terms in the language that apply to human differences. He may then describe the individual, observe honestly and fairly each characteristic and the experiences upon which judgment about it is based. If he studies his own characteristics in this way, he may be able to understand better what is good and what is bad in his mental make-up: what are surface stones, and what are deep ledges in his individuality; what can be corrected and utilised, what must be struggled against. He may be so fortunate as to find for the first time something that has stood in the way of success; something easily controlled when once it is clearly understood; and then can set about eradicating it.

Physical characters require the same methods of analysis, though perhaps most people are less able to understand their physical constitution than their mental traits. Commonly we leave to the physician to diagnose the strength or weakness of our bodies. But something remains for the individual to do for himself. He must estimate his strength for various kinds of tasks, his capacity for acquiring skill in this and that line of activity, his natural rhythms of work and rest. He must know his danger signs, his requirements of sleep, rest, food. He must estimate wisely the concessions that must be made to advancing age, and to changed conditions of life.

Some may say that such self-analysis is morbidly introspective, and leads to the dangers of hypochondria, or indicates lack of faith in the chances of life. Excess of good may of course be turned to evil, but wise study of self, reasonably undertaken, and resolutely turned to use, can lead only to good. There is room enough for faith and chance after we have done the best we can.

A third chapter of self-knowledge is the study of ideals. Everyone, consciously or unconsciously, formulates for himself or accepts from others, certain ideals or standards by which he lives. Success or failure in life, health, efficiency, depend greatly upon the ideas or ideals which lie behind the details of the daily life and direct the efforts. These ideals are of many kinds: religious, social, moral, practical, æsthetic. Some of our ideals, we may find, have been set too high: some are out of keeping with our ability or character. Some we may have accepted uncritically, or have acquired through a morbid experience or emotion. These have perhaps been allowed to grow unchecked, to misdirect interests, to colour all the activities, in a way to cause stress and perhaps illness. We may be unconsciously under constant strain to reach the unattainable. Wrong ideals cause worry, haste, lack of faith, and lead to nervous breakdowns and failure.

Many set up for themselves in youth mistaken ideals of moral perfection, of success, of social service, out of keeping with ability to carry them out. By trying to attain too much nothing is accomplished. They go on year after year, goaded on by ideals which perhaps have never once been met squarely, and the whole trouble of a disordered, restless, and unhappy life may be due to the lack of self-knowledge. Many of these wrong ideals seem to belong to the unconscious regions of the mind, or to exist in the atmosphere in which one lives. Such perhaps is the "New England conscience," those ideals of thoroughness, tenacity, and perfection which are upheld in our schools, and are often applied to every task without reason. The result, upon thousands, of such insidious and half-held ideals, is a life of unnecessary strain and disorder.

To know one's own ideals then is the most important part of self-knowledge. One must know clearly what he lives for and by, if he is to lead a rational life. He must be willing to educate and control his ideals when they prove to be out of keeping with his individuality. The injunction, Know thyself, is sometimes called the essence of Greek wisdom. If self-knowledge were an ancient need, it has been made more pressing by the conditions of modern life; by the nervous stress and specialisation of an industrial age.

#### SUGGESTIONS FOR READING.

There is as yet no science of self study, as is needed in the study of the personal problem of the nervous life, and there is no easy method of acquiring the most useful knowledge about the self. The literature of individual psychology is scattered, and is for the most part technical in character. The older forms of selfstudy, such as were attempted by phrenology, palmistry, and other pseudo-sciences are not adequate. A proper basis for self-study requires some knowledge of the theories of variation in animal life, knowledge of parts of psychology and physiology. The author's Outline of Individual Study attempts to organise the present knowledge and viewpoints of the subject in a way to be of assistance to those who study children, and in part to furnish a guide to self-analysis. References given there will still further suggest reading on this topic.

Study of some simple systematic psychology is an essential preparation for the study of any aspect of the mental life. Thorndike's *Psychology* may be mentioned as one, among many, which will do very well for introductory pur-

poses. Kirkpatrick's Introduction to Genetic Psychology is good, or if one wishes a little more advanced work, Professor Calkins' Introduction to Psychology. This book demands about the grade of mental attainment one usually finds in a college student of the first or second year.

The purpose of such reading is two-fold. It should not only instruct one in a way to be practical, by helping him understand himself, but it should prevent one being influenced by the cheap amateur psychology which is constantly coming in upon us from all quarters. The beginner cannot be too particular about what he reads in psychology. It may seem pedantic to assert that practically all the literature upon all scientific subjects that is worth reading comes from the college professor, or from men trained in university work, but the beginner can protect himself from much bad reading, if he will ask before he reads a book, who wrote it, what his position is, and where he was trained. A psychological work by a professor in a large university may not be without fault, but it can be accepted as serious work, based upon long training, and a knowledge of his subject. The many so-called "psychological" articles and books, which are put out by practising mental healers, or which come from the amateur, or from the private schools of "psychology" or "suggestion," or the colleges of "metaphysics" and mental therapeutics, should be passed by. After one has some conception of the science of psychology, as professionally taught, he may read what he likes, but to get one's first notions of a science from the second best or tenth best is poor economy, and in psychology it is peculiarly unfortunate.

### CHAPTER IV

#### THE NERVOUS LIFE OF THE INDIVIDUAL

WE have seen that the nervous life is a result not merely of the habits or temperaments of individuals, but is in part due to the process of social evolution itself. A nervous type is being produced, adapted to perform the work now most needed in the world. There is a problem of society, but there is also a personal problem of the individual. Individuals show in many degrees and ways variation from the most perfectly organised form of mind and body. The individual is complex, many factors enter into the production of everyone. No two are precisely alike. Therefore it is of the greatest importance to understand the constitution of men as individuals, and not merely as members of a group.

There are many causes of the nervous life. Heredity, surroundings, habits of life, accidents and misfortunes, enter as causes into complex results. Intensity and strain are in-

creased by isolation, by specialisation, by a too heterogeneous experience. Physical and mental errors increase the excitability of nervous tissues, and disturb the balance of energy. Emotions and interests, wrongly directed or untrained, add to the stress.

The individual causes of the nervous life are so many, and so varied in kind, so interwoven one with another, that it is never possible to say precisely what has produced a nervous temperament or disorder. The factors are always many, and the condition a complex result of all working together. This is a truth often overlooked, and much wrong education, and even wrong medical treatment, is the result. Some evident or most prominent cause or accompaniment of the condition is selected as the cause, and the treatment is concentrated upon that alone.

There has been in the past a tendency to attribute everything in the individual, especially all abnormality, to heredity, the inheritance of acquired habit in the parent often being supposed the cause of temperament of the offspring. The current of scientific thought is now away from this view. Acquired weakness

of the parent plays a less part in the career of the child than was once supposed, and much of the theory of hereditary ills must be cast aside with such superstitions as those about the marking of infants and other errors of unscientific eras of medicine. There are, of course, hereditary factors in temperament and disorder, but it now seems very doubtful whether the habit of the parent can be transmitted to the child. Effects of bad nutrition, and of some poisons, appear to extend to the child, and may lay the foundations of nervous disorders; especially alcoholism of the parent seems to affect the nervous system of the offspring. But the present tendency is certainly to look within the life of the individual for the explanation of his weaknesses, before heredity is drawn upon.

It is likely that a more potent factor in nervous temperament and nervous condition of the child than the purely hereditary trait is the inheritance of mutually conflicting traits or tendencies from two lines of ancestry. These are factors of the nervous life about which we know too little as yet, but it seems certain that both temperament and special traits of mind, such

as interests and instincts, can be inherited from either line of ancestry, and that ill-adjustment of these elements of the personality to one another can set up conditions of nervous strain and disorder in the life of the individual. In this way the seeds of discord are often brought together in temperaments which seem to have inherited no weakness from either parent. A sensitive and over-excitable temperament is submitted to the strain of strong interests or instinctive cravings. Either one of these conditions alone, when environment is unfavourable, may lead to a nervous life, and both working together supply all the factors needed for a life-long nervous struggle. A highly organised and nervous temperament may not itself cause illness, even when the conditions of life are unfavourable, and the presence of powerful instincts and emotions may not be detrimental to health and happiness; but together they may make a normal life impossible.

Many causes of the nervous life arise in the lifetime of the individual, which cannot in any sense be called hereditary. In general, anything which constantly excites and arouses the nervous system to too strong action; anything

which constantly increases excitability or tension of the nervous system, so that it responds more readily to excitement, may contribute to the making of the nervous life. We can distinguish physical, emotional, and intellectual causes, though in examining the life history of any individual, it may not be possible to separate them; for human life is exceedingly complex and intricate. Causes are often confused with effects, and cause and effect may become mutually exciting to one another.

When the nervous life passes beyond the limit of the normal and there is disorder or disease, many causes will be found. Usually there is a traceable heredity, or other temperamental basis, a history of long continued stress or unhygienic mental life, sometimes the result of an early experience, or a wrong ideal, or abnormal trait of emotion or interest; and finally, some circumstance that seems to be the deciding blow, the straw that breaks the camel's back, and which is all too likely to be mistaken for the cause of the disorder.

Among physical causes, whatever over-excites, exhausts, or intoxicates the nervous system creates the condition of mental stress

and disorder. The highly sensitised body of civilised man is susceptible to many physical disturbances that are as yet little understood. Many toxins are produced in the body which directly affect the nervous system. The products of muscle fatigue, of certain foods, of some purely pathological processes in the body are known to affect the mental life, and there are still other changes, as yet obscure, which may create mental or nervous conditions, apparently independently of wrong or unhygienic mental activity of any kind. In general, whatever causes production, in excess, of poisons in the body, or prevents proper elimination of them, may enter into the nervous life.

Much weight has been placed upon eyestrain, and the excessive labour of the eyes in mental work, as factors of the prevalent nervous temperament. It is well known that many specialists maintain that eye troubles alone cause the most severe nervous disorders. Records of school examinations show the great frequency of eye defects in the younger generation, and connexion is claimed between these troubles and the close desk work of the school, the excessive mentality of present systems of

education, and the increasing nervousness of the race. That the eye, which participates so sympathetically in the condition of the brain, and is so important a source of experience, is directly implicated in the nervous life can hardly be doubted by anyone, but, as is the case with other elements of the nervous life which come to the notice of physician and others concerned in the welfare of the body and mind, the importance of eye-strain seems often to be overestimated and it is mistaken for a fundamental cause, when it is only a contributing cause, or perhaps sometimes a result of more obscure causes.

Among mental causes of the nervous life of the individual must be placed, first, the condition when strong impulses work at cross purposes with the environment, which may almost be said to be a national psychosis. Ambitions working out in unfavourable conditions, and ambition wrongly stimulated, are prolific causes of high tension and nervous disorder. The lack of adaptibility that goes with strong talent or strong interests in occupation leads to tension, isolates the individual, and makes his social relations unnatural. Ill-adaptation to do-

mestic surroundings, æsthetic ideals and social tastes out of harmony with the surroundings, lack of sympathetic associates, all serve the same ill purpose. Whenever effort is thus excited to an unnatural pitch, or, to state it in biological terms, when the problem of adaptation is too severe for the individual, the nervous life results, in abnormal degree. Such conditions are prevalent, especially in our own country, where high social ideals are the possession of all classes, where social flux is so free, and the imagination of the young so easily inflamed by ambition.

In the emotional life there are many sources of high tension and isolation. If one is predisposed by nature to excitability of the emotions, environment, even if but little complex, will constantly excite and confuse the feelings. Many create a nervous life out of their own emotional nature, and wrongly attribute the cause to external conditions. They try constantly to alter the environment, or complain about it, when they should attack the inner source of the difficulty.

All strong emotions, especially the unpleasant emotions, use energy to excess, and may so

irritate and intoxicate the nervous system that they tend to be self-repeating. Chronic timidity, anger, depressional states, all wrong attitudes toward life, sensitiveness, pride, the habit of taking life too seriously, all moods too prolonged or in excess, will produce all the conditions for the development of the nervous life.

One result of evolution of the sensitive type seems to be susceptibility to lasting effects of certain experiences in the emotional life, called, technically, traumatisms. The great part these traumatisms or injuries play in producing actual nervous disease is now well understood; but how much of the everyday distress and strain of normal lives is so caused is not known. Richness of experience, especially emotional experience, and the need of organisation or education of the mind along a few lines of interest, make the nervous mind readily susceptible to the effects of suppression of undesirable or unattainable wishes, and in general, of all unpleasant experiences. Particularly, early sexual experiences, disturbances of the affections, fears, and shocks may become suppressed and embedded in the mind beneath consciousness, and, all unknown, constantly excite

and irritate throughout life. It is likely that, in the future, when the psychology of these obscure regions of the mind is better understood, a great work of education and preventative medicine will be directed to the training of the parts of the mind which now for the most part run wild, and become involved in nervous disorders.

The tendency among psychologists and neurologists is to attach more and more importance to the sexual life as the seat of nervous disorders. Especially those derangements in this sphere which cause moral distress, and therefore isolation of the individual (and these are far more frequent than was once supposed), may be regarded as among the most common causes of stress in the nervous life. No other factor can so readily produce isolation of the individual as trouble in this part of the emotional life, however slight or fancied the disorder may be.

Among the causes of the nervous life, mental overwork, which is so often blamed for nervous disasters, is probably far less potent than was once supposed. As a nation we have the appearance of being greater workers than we

really are, and much of the ill effect of our industrial life, which is attributed to overwork, and the pressure of too many duties, is more likely to be due to the temperament which creates excitement and stress out of any situation. Work under unfavourable conditions, over-ambition and other emotional accompaniments of mental work, make life nervously hard: but mental work done hygienically must be believed one of the most normal and life saving activities. Strong intellectual interests co-ordinate the life and give it direction. The lack of such interests is often the cause of strain. Undirected activity is demoralising. The idle and desultory life is not the easy life and in some temperaments is the cause of the greatest stress. It is often said, and truly, that the less one has to do, the greater the strain. For when there is no co-ordinating interest, the field of consciousness is occupied by distracting impulses and emotions which may be far more exhausting and disorganising to the nervous forces than work of itself can possibly be. Many who think their work hard, and exhausting even to the point of breakdown, would live in far greater danger to health if work were easier and hours of labour shorter. Forced interests, interests goaded on by wrong motives, too close pursuit of narrow ideals, work that is lacking in social value, too great repetition or monotony of the mental task, lack of recreational balance of work, are all evils very prevalent in our present life, and are all contributing factors in the nervous strain of it. But work itself, well done, under normal conditions, is not the great source of the nervous tendency of our times that it has often been believed to be.

This enumeration of the causes and conditions of the nervous life is of course not exhaustive. It will not enable one to locate the causes of nervous illness in any individual. But it may at least serve as a guide for anyone who undertakes to estimate the forces that are at work in his own life, which make for and against health and success. No one can be found free from all the ills and dangers that have been mentioned, and no one will be found in whom a single cause can be declared to be the sole important factor in his condition; the one evil which stands in the way of health.

Many of the evils mentioned, both positive

and negative, can be found in our prevailing system of education. It educates with too little reference to the whole individual. It does not truly socialise, but often merely collects children. It drives the individual back into himself in the very midst of ideal conditions for enrichment and organisation of the personality through social relations. It teaches too much, nourishes too little, fails to educate the emotional life. Its basic commandment is "Thou shalt not whisper," and this is the secret of its failure, considered from the present point of view. Freedom of activity and intercourse, self-development through the social life, are the very things needed more than anything else to cope with the increasing factors of tension and individuation which underlie the nerve strain of modern life.

### SUGGESTIONS FOR READING.

If one wishes to know more about the medical aspects of the nervous life, its causes in the individual, its cures, there is no harm at least in reading good medical literature on the subject. Both well and ill can do this without danger. In the great majority of illnesses, the

outlook of the physician is more truly and sincerely hopeful than that of the layman, and particularly is this true of all functional nervous disorders. A little preliminary reading about the structure of the nervous system, such as can be found in any good text on physiology or psychology should first be undertaken. Then parts of such books as Sachs, Nervous Diseases of Children, which deal with functional disorders, may be read. Any good text on nervous diseases can be read to advantage by the layman. One of the simpler texts on insanity, such as Diefendorf's may be added. Professor Freud's writings, mentioned in a later passage, are of great interest, and reveal the principles of a new school of practice in the treatment of nervous disorders. These writings are intended for the specialist, however, and the amateur reader must be content to obtain only a general conception of the work that is being done. See also, R. de Fursac, Manual of Psychiatry, and J. L. Down, On Some of the Mental Affections of Childhood and Youth.

# CHAPTER V

#### A SUMMARY

We can now see, at least in a general way, the nature of the personal problem that confronts anyone to whom the nervous life is of practical interest. We have seen what elements in the environment and in the social life. and what traits in himself the individual must consider in estimating his own place and function in life. But, before we undertake to show how the practical work of control must be done, it will be well to review briefly the principles that have been brought to light, and to show a little more precisely what, in the individual, the nervous life is; how the nervous life differs, mentally and physically, from the motor life. Few new facts need to be noticed, for already in speaking of causes, results have been described. But the picture as a whole can now be focussed a little more sharply.

Nature has set a task for the human body and mind, and has shaped social forces and in-

stitutions and the nature of man to its accomplishment. To meet the changing moments of the task, the human type changes. Life becomes more intense and mental, and more complex. Individuals are more specialised. Nervous systems are sensitised, demand greater control, and become susceptible to new dangers and diseases. Thousands, in the midst of these conditions, find themselves peculiarly sensitive to the evils of the nervous life. Some seem to suffer all the harm, and to acquire none of the good of the social progress. For all these, especially, the nervous life is a personal problem. It is not merely a condition in their environment. they must understand, but in themselves. It is of the greatest importance to them to know what the nervous life is, as contained in traits of their own minds and bodies. For only thus will they be able to live rationally.

Such people find themselves in possession of nervous systems and minds habitually acting at high tension, highly excitable, perhaps easily exhausted, with balance of expenditure and repair readily disordered. Many will find that they are leading lives abnormally isolated, their interests are too special, they are goaded on by unnatural or morbid traits of character. They suffer from inability to organise their experiences into a smoothly running plan of life, and emotional control is difficult. They are habitually over-excited or over-excitable. There are conflicting ideals, and the mind is full of unsatisfied longings, and half finished undertakings.

If these nervous people happen to gain an insight into their physical condition, they may find that their bodies suffer from the effects of auto-intoxications. Digestion, in some of its stages, is imperfect. There is too much waste, too little repair, and the products of fatigue are not properly eliminated. If these disorders (which cannot yet be called illness, because they are so wide-spread and exist in so many degrees among those who continue to lead normal lives) progress still more, symptoms of nervous disease arise. Under the effects of overwork, or shock, or exhausting emotion, all the inherited tendencies, the effects of life-long illadjustment or unhygienic living, of strain and repression, seem to summate, and there is nervous breakdown. Then it is seen, perhaps, that this event is not a sudden happening, but the

result of many factors, long continued. It is seen that every part of life is related to every other, that the beginnings of disorder were laid in childhood, and that prevention, which would have consisted in a wise ordering of the whole life, would have been easier than the cure will now be.

If anyone doubts the prevalence of these conditions, and that our country is producing them in abundance, he can be convinced by visiting any school. The life of the school reflects the conditions of society, and the individuals in it are types, in the making, of what the next generation is to be. In the school it will be found that there are many interests, not as yet well co-ordinated. There are children widely different from one another in social and industrial ideals and experience all undergoing the same treatment. There will be found the appearance of haste, restlessness and strain. One will not fail to find the excitable child, the emotional child, the child with badly controlled movements. There will be the child with abnormal emotional tendencies, the unsocial child, prone to shyness and repression, the uneasy, the unhappy, the restless, the ambitious child.

some will be detected the signs of abnormal fear, worry, and irritability. Closer inspection will disclose disorders of digestion and of other functions.

These children have already seriously before them the problem of the nervous life. Much depends, as to their welfare and usefulness, upon the wisdom of those who direct them; upon parents, teachers, and physicians. If their lives are well ordered, and they are trained to have self-knowledge and self-control, they will probably live normally, and contribute their part to the world's work. If they are not wisely dealt with they may add to that already too numerous class of failures, defectives, the nervously ill, and the broken down.



## CHAPTER VI

#### PRINCIPLES OF CONTROL

WE have tried thus far to discover what, in its most general form, the nervous life is, both in society and in the individual, and what has produced it. If we have hit upon the truth, many practical hints for the study and solution of the personal problem should be in sight.

It has been seen that the causes of the nervous life are complex and deep-seated. The cure must be as broad as the disease. The condition involves the whole life, and not merely one part of the body, or one mental function. Therefore nothing less than the ordering of the whole life, mental and physical, can be called a rational effort to control or cure the evils.

It is plain that no individual can be understood without considering his relation to others. The condition of any one is determined in part by the condition of the whole. Every life must be social. The individual must work and pro-

duce results acceptable to others, and useful to them. He must adjust himself to these requirements, and not try to adjust the environment to his needs. Life, to be normal, must be a service. Living for pleasure, for self-culture, for health, is not complete living. Normal activity reaches out tangibly into the lives of others in some way.

On the other hand, to be normal, life must have comfort, health, and pleasure. One has a right to expect to work along lines somewhat suited to his natural interests and abilities. He need not feel that life is essentially a sacrifice of self. There should be pleasure in doing the work, however hard it may be. If there is not, something is radically wrong, and the personal problem has not been successfully solved. One must learn to work effectively, with comfort, enthusiasm, and freedom from excessive strain and danger.

Leaving aside the public means of regulating the intensity, strain, confusion, and other unwholesome conditions of life, let us see what can be discovered in the way of practical rules for the individual.

At least four general requirements of a per-

sonal hygiene of the nervous life can be found at once.

- 1. In every nervous individual, the habit of too great intensity of mental activity must be cured or controlled. For tension is one of the universal faults of the nervous life. In all cases it will be found that something remains to be learned in this regard. To this end emotions that goad on the mind to over-activity must be attacked. Interests must perhaps be re-adjusted, ideals modified, and wishes abandoned. Here, too, is the problem of rest, of relaxation, both in its mental and physical aspects.
- 2. Invariably there is some degree or form of excessive individuation. Here enters the problem of the adjustment of the individual to society. The question must be asked how the work can be made more social, how the relation of self-interest and work as social can be made more normal; how emotional causes of strain and isolation can be eliminated. Interests must be trained to this end. The problem of the recreational life arises.
- 3. Always there is some degree of mental disorder. Experience is never organised with

ideal completeness. There is mental confusion. To overcome this is essentially a work of education. It is preventative. The mind must be trained by being organised. Interests must be ordered, so that the lesser contribute to the greater, and there is a balance among them, and the mind may bring order out of the confusion of experiences and stimuli that assail it. To be normal, one must have a mental organisation in which interests all have their proper places and do not conflict with one another. Though this is essentially the educational problem, the work of teacher and parent, it is also a problem of the adult, which he must solve for himself.

4. The fourth general conception for the control of the nervous life is that the organism, mind and body, is an energy system. It can be exhausted, restored, controlled, both by mental and by physical means. As a machine the body has its definite laws, its optimum mode of working to produce the most power from its supply of energy. This optimum mode of living must be reached. All the resources of hygiene must be called in to attain this ideal. A régime of treating the body and mind must be adopted, not for a week or a month, but for a lifetime.

Means must be taken for improving the energystoring powers of the organism, for controlling the expenditure, for eliminating the waste. Here enter the commonplace questions of eating and drinking, of care of the skin, exercise, sleep, and the like. One must learn to utilise all the forces in nature.

It can readily be seen that each of these problems involves more or less of the others. They are not four entirely disconnected means of controlling the nervous forces, but four points of attack, each aimed at a fundamental cause of the nervous life. All together represent an individual's search after an optimum mode of life, his means of preserving health and balance in the midst of forces that in many ways threaten to destroy him, or to make him unfit to do his work.

We now see that the problem of health is wider than merely to discover the most correct mode of life, judged by physiological standards. This is but a part of the problem, and it fails altogether to take into account other factors, perhaps much more important; the psychological and the ethical. It is given to but few to live ideally hygienic lives, from the stand-

point of the physiology of the individual. The duties of most call them into dangers, make them endure hardships and unfavourable conditions; to lead lives they know to be out of accord with known physiological laws. This thought is often the cause of needless distress. Many feel they are living unwholesome lives, because they consider the problem only from a narrow physiological point of view. No one reaches the ideal of perfect living. The interests of self and of others often apparently clash. Necessity often compels one to do what he knows to be unhygienic. But when this situation is considered broadly, it will be seen that hygiene is a very complex science. The physiological is but a part of it. A normal social life, that is, a life of social service, is the first requirement, on higher grounds than the physiological. We shall see later many reasons for believing that there is less conflict between duty and health than is generally believed: that hard work, when done in the spirit of loyalty, is itself the most healthful of activities, and oftentimes saving and curative of both body and mind, in ways as yet imperfectly understood.

## CHAPTER VII

#### THE OPTIMUM LIFE

THE personal problem can be expressed, in biological terms, as a search for an optimum mode of life. All animals instinctively do this. They are equipped with special instincts which direct them, and they also profit by experience, which enables them to choose that mode of life, and that habitat, which is for them, the best. They migrate here and there, seek those conditions of heat, food supply, and shelter, that are best suited to them. And, as is the case with man, their adaptation is not entirely for the individual, but for offspring and for the community to which they belong. Even in the lower forms of life one can see that instinct often leads to the choice of life not merely for personal safety and comfort, but it selects in the interests of the particular work which the animal performs in the world.

Man uses both instinct and reason in choosing his mode of life. And, more than any other

animal, he must depend upon his own experience and reflection. We seem now to be living in a period between two eras of better adaptation to work. Instincts seem no longer to be adequate to guide conduct, and reason has not yet been able to take up the work. New instincts, it is likely, are being produced, and temporarily the old instincts must do the best they can, helped out by reason. Everyone must, therefore, work out for himself the optimum mode of life. His instincts are not sufficient to guide him. He cannot accept the experience of others altogether; and no text book contains precisely what he needs.

The day can be called the unit of life. If a man can learn to live wisely for one day, he can be said to have succeeded, in a great measure, in solving his personal problem. In other words, one must have as a central thought of his plan of life, a conception of a day which represents for him the most effective day of which he is capable—the most normal, best suited to be a model or standard upon which all his days can be formed. However much he may need to vary these days, he will know that in the long run he will accomplish most by adhering, in a

general way, to the plan of life which this day represents. In rare cases, if activity is very varied, he may need to consider as a norm a longer period, a week, or a month, but everyone who tries to direct his energies must have a conception of the unit of time with which he works. His day will necessarily change with age, and be modified by conditions and occasions, but it will never be lost from sight altogether.

The optimum day will differ vastly among individuals, and it is this difference that indicates the mode of progress by specialisation. It is conceivable that for one, the only day which can in the end produce any practical values in life, is a day of almost complete rest; but it is not a complete day, a unit of a life, unless it accomplishes something, however little it may be, that represents the life purpose of the individual. For another, the optimum day may be one of the most self-forgetful and strenuous activity. For the great majority, it will be neither of these extremes, but it must be for each a day of maximum fulfilment of purpose, with a minimum of waste.

It may seem to some that life is so full of unexpected demands, that so many occupations call for the making up of each day as it comes, that no optimum day can be found. And it may perhaps seem more evident that individuals differ so much from one another, that no rules for an optimum day adapted to one, will be useful to another. But these objections will be seen to be unfounded, if one looks more closely at the problem. Through all his changing activities everyone preserves a temperament or character that is largely unchanged. The optimum day is his effort to express the essence of that temperament in a mode of behaviour best suited to it. And though individuals differ so much from one another, there are fundamental resemblances in all. So, the problem of the optimum day is common to all, and it is safe to assert that no one who has failed to work this out in some way for himself has understood the economy of life, or has succeeded in working most effectively.

System and routine are essential for all, for both mind and body work according to definite laws, and the functions of the organism are best used when they are habituated to act in certain ways at fixed times, and in such a manner that the power of habit is used whenever possible.

It may seem trite to say that to have no order. to go through life guided by the desires of the day or hour, is wasteful of the greatest force in the world, human energy; but when one sees how much is lost from every life because the best modes of conducting and conserving energy are unknown, and that even a slight bettering of the control of the human mind would put an end to much of the poverty and suffering in the world, it will be seen how important the problem is. It is safe to assert that if one hour a day of useful activity could be added to the productive life of man, even if the quality of the work were not changed, most of the economic problems would be solved. And there are few lives that could not be made to yield this energy, by practising only those best known principles of economy which are ready at hand.

In planning the optimum day, one will find that he needs all his resources of self-knowledge, and all the general knowledge of the sciences of human nature he can command. He must know the ethical values involved, and see clearly what his main purpose is. He will use his instincts, his reason, and the results of experience. And there will be room for

trials and errors. And, finally, he must remember that life is an art, and its unit, the day, must be judged by those standards which we apply to all matters of art. It must have unity and harmony; it must satisfy, in other words, our æsthetic senses. The physiological, the psychological, and even the ethical judgments are not sufficient, for the life that is not ordered in a way to satisfy the elemental judgments of order and harmony is not completely well ordered. And it is likely that it is not hygienic in the largest way, nor fully effective. Days of greatest achievement and of greatest pleasure, when judged by these standards, often seem to leave something lacking. The ethical may be the final standard by which a life as a whole, and its unit, the day, must be judged, but the æsthetic must be considered also. It is this sense of order and proportion that mellows the stern requirements of duty, and which perhaps brings the self-interest and the interest in others into a harmony, which scientific principles and reason cannot, by themselves, attain.

# CHAPTER VIII

#### THE PRACTICAL PROBLEM

Having now in mind what seem to be the main principles of the causes, conditions, and control of the nervous life, its relation to normal growth and evolution, and the nature of the individual or personal problem, we can turn to practical details and study those common and most readily accessible resources of nature, of the social life, and of the self which all use constantly, some more wisely, some less, in their efforts to maintain their place in life.

These questions comprise the ordering of the day, food and drink, sleep and rest, relaxation, and many others which, though especially physical, are also mental. The means of mental control must be touched upon; work, recreation, training of the emotions, the resources of suggestion and habit. The new mental cults and health systems must be looked into. In fact, nothing should be overlooked which can be pressed into the service of the nervous life.

We shall find that in every question which arises, however commonplace or practical, the fundamental principles which have been found will enter helpfully. They will be the connecting threads which should assist one in making his régime of life a reasoned, orderly, and connected effort, rather than a series of disconnected and spasmodic attempts to combat each danger and ill as it arises.

A carefully reasoned and orderly mode of treating topics could be adopted, taking into account the main purposes to be accomplished by a régime, or arranged according to the psychological elements of the nervous life which are to be combatted. But a more simple plan is followed. The common topics of hygiene are taken up in order, first those more especially physical, then the mental, and finally a little of what may be called the ethical. The relation of each to the problem of the individual is shown, and every-day problems of hygiene are discussed from the point of view of the nervous life.

### SUGGESTIONS FOR READING.

In studying the general principles of control of the nervous life, one will naturally look into many kinds of books, if the point of view of this chapter is taken at all; that is, that only by a broad study of the whole life can the condition be coped with. The literature of physical and of mental hygiene must be examined. Something must be known about school hygiene. The medical treatises on nervous ills should be looked into; the special methods of cure practised by various specialists, schools, and institutions are to be studied.

The medical literature has already been sufficiently mentioned. Of books upon hygiene, we have a great number. Physical hygiene has developed first, but there is now a rapid growth of the science of mental hygiene.

Every home needs to be informed about the hygiene of the child, from infancy to adult life. Among many good books can be mentioned:

C. Harrington: A Manual of Practical Hygiene. A large scientific work.

W. L. Pyle: A Manual of Personal Hygiene.

A. Forel: Hygiene of Nerves and Mind in Health and Disease.

W. Hutchinson: Instinct and Health.

C. W. Salesby: Health, Strength and Happiness.

- H. Barrett: The Management of Children.
- R. H. Crowley: The Hygiene of School Life.
- L. M. Yale (Editor): Nursery Problems.
- L. Burbank: The Training of the Human Plant.

## CHAPTER IX

#### FOOD

Ir one wishes to accomplish the most possible with mind and body, common sense must tell him he must take into account every factor of healthy living, and guide his conduct resolutely by what he finds to be best. Living, as we now do, in times of stress and excitement, we must have every function under control, and no element of good nor ill must be overlooked. Every ounce added to the pressure of living makes the need of controlling each detail the more necessary. This is generally understood, and health is more earnestly sought now than ever before.

It is quite in keeping with this awakening consciousness of health that the food question is so often brought before us. This is no mere fad of the day, for everyone who wishes to accomplish the most possible with his energies must sooner or later raise this commonplace question of food and drink. The almost morbid

food consciousness of the present day, the prevalence of food specialists, systems of diet, health foods, are indications that there is a change in public opinion about foods, and that in the near future our eating habits are likely to be somewhat modified.

Between two extremes of opinion: that diet has little or no significance for health, and that upon the choice of precisely the best food, health almost entirely depends, it is likely that a happy mean will be found. It can be maintained at least that, though we are now beyond the stage in which the most naïve appetite can be relied upon, we cannot as yet put trust implicitly in any scientific conclusions about diet as a whole. The best physicians still admit that in many cases they must proceed experimentally, and that in general we do not yet know precisely what the best food is.

Anyone who takes up the food problem seriously is likely to fall a victim, sooner or later, to some new system of diet. If he modifies his natural eating habits at all, he is likely to change them radically. He casts natural appetite aside, and eats according to a formula, upon which he comes to think his health en-

tirely depends. If this formula happens to be a hastily derived conclusion, made by some half-educated person from the latest scientific discovery, as is too often the case, nothing but harm is done. The history of medicine, of education, and even of religion is full of just such wrong and hasty applications of theory and fact to practice.

Eating has been such an essential activity of the race, so many instincts, and even organs of the body, have been produced to provide us the means of procuring and utilising food, our tastes have survived so many thousands of centuries of selection, and have done so well for us on the whole, that they cannot lightly be cast aside, even for what seem at the moment to be scientific conclusions. The scientific fact often expresses but a partial truth, and when it is applied in the belief that it is the whole truth does only harm. Physiologists have been in part to blame for spreading abroad the view that the problem of diet is to supply the stomach with precisely the quantity of the most easily digested food necessary to support life. Digestion is a very intricate series of processes, and some of the steps are almost entirely unknown. It is a motor process as well as a chemical change. Food performs many functions. It must not only nourish, but stimulate, and it must not poison the body. Eating, too, has its psychological and æsthetic sides, its social and moral aspects.

It seems as though all must agree that natural appetite and custom must be the foundation of the philosophy of food. For what else can we put into their place, which will not be narrow and unnatural? Natural appetite demands a liberal and all-round diet, and this must be the basis for all. This can be said to be true not only for the strong and well, but for the nervous, and broadly speaking, for the invalid. If energy is low and digestion poor, there is all the more need to widen the diet. One must push out into new fields, and learn to eat and digest many foods and thus carry his digestion to a higher plane. The opposite tendency, which is too often the result of the test-tube physiology, to seek for the most easily digested foods, and to eat only the quantity sufficient to nourish the body, violates nature. In nine cases out of ten, when such an idea is substituted for natural appetite, the result is a too

narrow, too concentrated, and too easily digested food; likely to be too rich in starch and sugar, and perhaps in lean meat, with too little vegetables, fruits, and fats. Many who think they are thus protecting themselves from the evils of the table are causing them. Remove from them the fear of indigestion, allow natural appetite to prevail, teach them to eat, and they will be better in health, and more normal in thoughts. The whole history of the human race and of its animal progenitors indicates that food should be varied, abundant, not too concentrated nor too easily digested. Stomach and intestines are motor organs as well as chemical laboratories and they are stimulated to action by quantity of food. Therefore the inclusion in the diet of such articles as the coarse vegetables, which furnish bulk without excess of nutriment or harmful waste. Once each day at least the body needs a hearty meal, and it can safely be said that many, who think themselves incapable of eating what they know they need and wish, would be better in health, both of body and mind, if they would allow natural appetite to direct their choice of food.

But the authority of science must also be re-

spected. We are living under conditions of unnatural strain and fatigue, many having temperaments which make them peculiarly susceptible to intoxications from food. What can science suggest in the way of prevention? Does the intense, individual, and complex life, with its motor restraints and intense mental states, demand a radical adjustment of feeding habits? Possibly, in the future, great help will come from science, and we shall know far better than now what to eat to be properly nourished, and especially what to avoid in order not to be poisoned. The relations between various food products and many abnormal processes will perhaps all be clear. We shall perhaps know more precisely what, in physiological terms, the changes produced in the body by these new and strange modes of life are. Science can then dictate to appetite, to a certain extent; until, perhaps, new instinctive tendencies arise to confirm, or refute, the new habits.

It is certain that the nervous life creates dangers which are increased by improper food. Probably most who live sedentary lives have less perfect digestion than those who have motor occupations; and dangers to them from

absorption of food poisons are greater. Two articles of food seem to be under suspicion by science and in the public mind as well, and it is likely that change in taste is slowly taking place in regard to them. These articles are sugar and lean meat. Both seem to be more essential to the motor worker, and to be especially harmful, in excess, to the mental worker: sugar, especially by causing fermentation in the stomach, and meat by decomposition in the intestines. Some reduction in the amount of these foods commonly used by the nervous worker is indicated. Many articles of food, otherwise harmless, are made unwholesome by adding sugar. Nearly always these will be found to taste better in their natural flavour, after a little practice. For meat in large quantities, vegetables in greater variety can well be substituted. Certainly, if one dislikes the common vegetables or entertains the belief, which seems common in some parts of the country, that green vegetables are harmful or dangerous, he should learn to like them, and bring a good variety of them into his diet.

A few other articles can well be avoided on the authority of science: salt, for example, which in excess probably hastens deterioration of tissues, and all high seasoning, which, besides being too stimulating, interferes with the enjoyment of the natural taste of foods.

As to quantity of food, a question which the changed conditions of work raises, it is probable that most people eat more than is required to nourish the body. Haste in eating, drinking of much liquid with the food, eating unsocially, all encourage over-eating. Hunger is more than the craving of the body for a full stomach, for it is in part taste craving. If the habit of eating slowly is formed, taste hunger is satisfied without the danger of over-loading the body with waste.

If a few such simple precautions are taken, it will be found that a much wider variety of foods can be eaten and enjoyed, both by the well and the ill. It is not necessary to confine one's food always to the most easily digestible kinds, if taste strongly demands others; nor need food always be cooked in the most easily digestible way. Moderately indigestible foods, even coarse foods, lacking in nutritive qualities, have a place in the dietary and should be included.

We must not forget the psychological side of the problem of eating. Though the psychology of taste is but little understood, we can see at least that there is more connexion between taste satisfaction and body satisfaction than physiology can vet understand. The body may be well fed, and yet hunger, in its more psychic form, remain. What the physiological effects of the satisfaction of taste hunger are we do not know, but it seems likely that over and above the recognised uses of food in the body, the satisfaction of a craving for a particular balance of taste in a meal is necessary. What the harm may be from the failure of food to satisfy thus æsthetically we do not know, but that it is more than merely mentally unhygienic is quite probable.

These thoughts apply to the use of the forbidden articles and to the so-called poisons, such as alcohol, coffee, and tea. Shall they be excluded entirely from the diet, if we wish it to be perfectly hygienic? On physiological grounds, so far as we know, it is safe to say they should be, or at least that they are questionable, and for many, dangerous. But for other reasons; mental, æsthetic, social, they all

seem to have a place. And may not the poisons, in moderation, have physiological virtues of which we know nothing? At any rate, it seems as though, if they are strongly demanded by taste, there are reasons for admitting them as luxuries, even in the face of plain disapproval of physiology. There is certainly some place for the luxuries and delights of the table, for that which is esthetically pleasing. of some importance, too, for most of us, to do as others do, wisely and in moderation. And those who are much limited in health and energies need not, and indeed must not, forego everything that others enjoy; for they thus become even more isolated and eccentric. It may even be better, hygienically, to endure actual distress from indiscretion than to shut oneself up within the circle of too narrow habits. Fortunately ill effects do not necessarily follow upon mild indiscretions, if there is a foundation of good habits to support them.

The limitations of the purely physiological view may be of comfort, too, when, as occurs with everyone, apparently unhygienic living must be endured for a time. Even physical benefit is often derived from apparent violation

of the laws of nature, in a good cause. Especially, hardships endured for the sake of something of great practical importance often seem to be neutralised, or turned to advantage by the body. We understand so little as yet the powers hidden from consciousness that we have quite as much reason to be trustful as distrustful of the body, when we must go beyond our present knowledge and depend upon chance or faith.

In the arrangement of meals, prevalent in this country, it seems as though we had contrived to be as unhygienic as possible. Millions of working men have the noon dinner. They hurry home from work, eat the heaviest meal of the day in a few minutes, hurry back to the factory, and at once begin their work. At night, when they usually have more leisure than any other class, they eat, perhaps, a light and hasty supper. The theory is that one must "work on a full stomach," and that there must be activity after eating or the food will not digest. It is difficult to see why this plan is not totally bad in every way. In the summer it surely tempts grave ills, which all too frequently follow.

The fashionable man, on the other hand, whose greatest activity is likely to be in the evening, eats a late dinner, and digests it as best he can in the hurry of an evening's social excitement.

It will repay the nervous worker, at least, to consider whether he is suffering from the effects of wrong habits of eating, for it is very likely that he is. The custom of eating very heartily during the day is one which can be overcome without discomfort, by a little practice. The slight discomfort, or even faintness, that may be felt at first will disappear in a few days, when the belief that one must be well fed just before going to work, is overcome. There appears to be a belief, too, perhaps more prevalent in New England than elsewhere, that one must never eat heartily at night, especially meat being forbidden, and to eat anything just before going to bed is the cardinal physiological sin. Now it is not true that activity must follow eating, that hearty eating should precede heavy work, nor that eating heartily at night is dangerous. The experience of invalids who take rest treatment with forced feeding shows that digestion goes on very well in complete idleness

of the body. In fact, of all times, times of rest are best for digestion, if there is no very great fatigue or exhaustion. The greater part of the last stages of digestion in all probability takes place during sleep. If the diet is properly selected and meals are arranged hygienically, the body should be so well nourished at night, and so well restored by sleep that it can go through the day without enduring the discomfort of an over-loaded stomach, in order to replenish the lost energy.

It seems decidedly better to eat oftener during the day, and to eat less at one time, than is usually done. In this way periods of physiological depression are tided over, and the cravings of the more psychic hunger are appeased without over-eating. If, for the most part, liquid and solid nourishment are not taken at the same time, another excellent precaution is taken. Liquid food, considerable in quantity, and not too nutritious, is certainly better than solids when there is hunger between meals. And when a stimulant is required, a large quantity of water, especially warmed or hot, is far better than any concentrated stimulant. It serves several useful purposes. Besides stimulating,

it assists digestion, and helps to eliminate poisons through kidneys and skin.

In general, there should be a period of rest before and after each meal. The rest time may of necessity be short, but even five or ten minutes of relaxation will help. At least there should be a time of relative inactivity. And after the noon meal, complete rest, decidedly better in bed, and best of all—sleep.

At the risk of adding still more to commonplaces, a simple meal plan for the three most important meals of the day, is given, which is believed to be a good standard which anyone who studies his energy problem can examine to advantage, and from which he can adapt his own plan. Such a diet, too, is quite well suited for the great majority of nervous sufferers, and it is more especially to these that an outline may be helpful.

Breakfast. Fruit, toast or twice baked bread or rolls, best made from coarse flour. Cereal: corn, wheat, or oat, well-cooked (avoiding too great repetition of the same article). One or two eggs, cooked in any way desired. In many cases the amount thus indicated could probably be reduced to advantage.

Luncheon. Bread, easily digested meat or fish in moderation, potato (baked, or occasionally boiled or fried), a small quantity of peas, tomato, or other vegetable. Unsweetened sauce or other light dessert. Though it is not necessary to rise from the table hungry, it is better, at breakfast and luncheon, to put some curb upon appetite, until it is trained to respect natural limits.

Dinner. Dinner should be plentiful, but entire freedom should not be allowed to appetite, unless it is well trained. But there may be opportunity to make up arrears, if there have been privations during the day.

There may be soup, fish, meat, usually roast, not more than two vegetables, perhaps a light salad. There need be but one dessert, or on occasion two, and these not too much sweetened. Wide variety is of course allowable and desirable, in the content of the meal plan, but the general form, it is believed, should be maintained.

These commonplace suggestions must serve for discussion of the relation of food and drink to the nervous life. If they seem too simple to mention at all, one can be reminded that every physician who treats nervous disorders knows that violation of just such dictates of common sense causes much of the suffering among all classes of society.

For the most part, diet is not yet a subject of exact scientific knowledge. But a few general principles being understood, the whole matter becomes one of self-control and training for the sake of a valuable end. It is a broad problem, and anyone who considers it even superficially must see that it cannot be solved by any one new discovery or idea. It is absurd to put one's faith in some unnatural system that flies in the face of all natural desire, and even the more scientific diet plans may do more harm than good by making the individual socially isolated or eccentric, abnormally conscious of health, and too narrowly devoted to one idea. Nature is too complex to be pressed into a single formula. The mental, the physical, even the æsthetic and social factors-and the moral and economic-must all be considered, even in so commonplace a problem as that of food and drink.

#### SUGGESTIONS FOR READING.

W. G. Thompson: Practical Dietetics. A large medical work which will show what ground the science of foods must cover.

R. Russell: Strength and Diet.

Chapters in books already cited. For example, Hutchinson's *Instinct and Health*.



### CHAPTER X

#### THE SKIN

The skin plays a far more important part in the economy of all animal life than is often supposed, and it has not yet received the attention it deserves in the study of health. Putting it out of sight, we have put it out of mind. Yet the skin is one of the most obedient servants to the health seeker, if it is properly studied and treated.

The skin has had a remarkable history in animal life. From it all the senses have been derived. It is still the seat of several well-known functions, and it performs other and more mysterious parts in the balance of life. Pain, temperature sense, and touch are contained in it. It still retains muscular functions. It is the seat of organs which control perspiration, is connected in intimate ways with various functions of the nervous system. It performs the duties of kidneys and lungs—and is indeed so important that no great

degree of interference with it will cause speedy death.

It is quite worth while, therefore, to study the skin, and to see to what extent it may be made to do service in the work of conserving energy and prolonging life—for it seems likely that so important an organ must be capable of education, and, if need be, of special care and treatment.

It seems as though nothing new could be said on the subject of bathing; yet it can be asserted confidently that very few know the extent to which water can be used to preserve and attain health. By its use, not only can the temperature sense be educated, the body kept cleaned of many poisons, but the body can be hardened to weather and privation, mental activity controlled, sleep habits improved, heart and blood vessels trained, the nervous system stimulated or soothed; indeed the uses of water are so many that it is difficult to enumerate or to describe them all. This need not seem strange, if we recall that for millions of years, all animal forms, including the progenitors of the human race, lived in the sea.

At the risk of repeating what everyone

knows, the daily bath must be mentioned. The very cold plunge is now open to much question, and at least it can be said to be unnecessary. The bath had better begin with a plunge in warm water, or the fine spray be used, and then the water be gradually cooled, until cold water is allowed to play freely over the body. For most ordinary purposes, the fine but swift spray is the best.

For overwrought body and mind, the prolonged warm bath at bedtime is the best of all sedatives. Water should be of the temperature of the body or higher, the room comfortably warm. The bath may be continued for fifteen or twenty minutes, for the effect of prolonged lying in water is often very great, and is peculiarly effective in reducing mental stress. For habitual sleeplessness the prolonged hot bath is perhaps the best of all treatments.

Better than the excessively cold plunge for the education of the temperature sense is the cold air bath. Moving about briskly or taking light exercises, naked, in a very cold room, can safely be practised, gradually lengthening the time of exposure. For rubbing and dressing there should be a warm room. Best of all, when there is opportunity for it, is the out-of-doors air bath. Everyone must have observed how much children like to run about naked, even in the extreme cold. Cold air stimulates both body and mind, and the exhilaration of cold air streaming upon the face should indicate to one the possibilities of the general bath in this fundamental element. Every boy knows that half the fun of the swimming excursion is the going about naked, for the cold air is quite as refreshing as the water—and of all childhood pleasures, what is greater than running about naked in the summer rain?

Sun bathing is another source of health and strength, worth the trial of anyone. Sunning has had a long history in the race, and even in plants we find the habit of seeking the sunlight. Indeed, heliotropism is one of the earliest expressions of something like mind in the plant world. Animals show preference for rays of one or another colour, and growth is sometimes dependent upon the animal's ability to secure its optimum of light. We do not know as yet all the effects of sunlight as a remedial agency, but it is known that it assists metabolic processes, is an energiser and tonic, and in-

creases the power of resistance of the body to some germ diseases. What we have lost by covering the body by clothing we do not know.

Sun bathing can be practised in any room having the right exposure to light; or better, in warm weather, on a veranda, properly arranged. The head may need to be protected from the direct rays of the sun, or kept cool by application of cold water or ice. Lying in the sun, without removing the clothing, is not without its beneficial effects.

The possibilities of care of the skin do not cease with bathing in water, sun, and air. The skin has power perhaps to absorb nutriment, and at least to be benefited in other ways, by treatment with oils, as was well-known to the ancients, though oil bathing is now, for the most part, a lost art. The olive oil and cocoa butter rubs, well-known in the treatment of nervous diseases, are perhaps a survival. Such treatments, besides being curative, have a use in the daily life of the nervous worker. For thus the skin, dry from motor inactivity, can be nourished, and stimulated to perform its natural functions.

Clothing is another problem of the nervous life that must be considered by everyone.

Two dangers are to be avoided. If clothing is too thin and light, heat is lost from the body, and energy goes to waste. If clothing is too thick and tight, heat is stored in the body to excess, and secretions are not allowed to escape freely. Recently the second danger has been emphasised, and the general opinion seems to be that too much clothing is usually worn, and that the dangers from too heavy dressing are greater by far than we have supposed.

It should be known that the sense of cold is composed of two factors, one of which, at least, is capable of much education. Cold is in part a skin sensation, and there is also a sense of cold from loss of heat from the body. It is worth while to educate the skin sense by exposure, so that clothing can be worn comfortably, that is light and loose enough to prevent heat storing.

Clothing should be as light and loose as possible and not allow too much heat radiation. Air must circulate freely about the body, and both day and night clothing should be arranged to allow it. Underwear, especially, should be very loose, and not too tightly binding at wrist and ankle. Heavy underwear seems to have no

reason for existence, and it is doubtful whether woollen is desirable at all, unless very thin and light, and loosely woven. Warmth can always be increased by adding outer covering, but with heavy underwear there is no protection from sudden over-heating.

All the functions of the skin are hindered by heavy, tight underwear, causing heat accumulation, and besides the increased danger from chill from retained moisture in the garments, the body is subjected to the ills due to retention of noxious products of metabolism, that should be carried away in the air. Many who believe they need the protection of thick, warm clothing would be greatly surprised at the beneficial results of light dressing. The danger from colds is lessened, comfort and warmth are increased.

Changes toward lighter dress can be made in other respects. Low shoes, for example, are quite suitable for winter wear for many, even in the coldest weather, the ankles being protected from wet when it is necessary. The habit, growing more general, of going without overcoat and hatless signifies that a change of public opinion about clothes is gradually taking place.

Throats are no longer protected from cold as they once were, and it is now known that hardening the throat to weather changes is the best preventative of the common inflammatory ills of the air passages.

The principle involved is that the whole body, and not merely the lungs, needs fresh, cold air. Merely getting one's head into the air is but a small part of the air treatment. One may die of poisons retained in the body, with mouth and nose exposed to the most abundant supply of the purest air. The breathing power of the skin should be cultivated. The moist hot air about the body must be carried off, for accumulation of heat in the tissues caused by dead layers of hot air about the skin, is probably the cause of more ills and discomforts than we yet know.

Now that a "cold," and many other ills once thought due to cold air, are known to be germ diseases, the only objection to fresh air is removed. The popular notion still prevailing about cold is certainly mistaken. Whatever one may contract by exposure it is not usually a cold, and even the belief that wet feet are dangerous to health must be in part at least abandoned.

This change of belief is very timely and fortunate, for in the past the fear of taking cold has been a serious obstacle to healthy living. Especially the nervous worker, needing all the nourishment and refreshment from nature he can get, must inure himself to cold and become accustomed to all kinds of weather. He who must stay indoors for fear of cold, wind, storm, and heat, is much limited in his fight for life and health. All the elements are life giving and strengthening, and must be enjoyed. It is necessary to give one's body up to them confidently, and to extract from them all the good contained in their strengthening and purifying forces.

### SUGGESTIONS FOR READING.

Chapters in works on general hygiene, previously cited.



## CHAPTER XI

#### EXERCISE

EVERYONE must be aware of the great interest, at the present time, in physical development. It is shown in the attention now given, in the public school, to the physical welfare of children, by the playground movement, by the physical culture systems advertised continually in newspaper and magazine.

If one thinks about this, he will easily understand that the physical culture movement is no mere fad of the day, but the expression of a deep need. We have changed as a race in a very few generations from a motor to a sedentary life. We reach out continually to greater distances, but we go by thought and not by action. Even warfare, which sets standards of physical prowess, is now far more mental and far less physical than it once was. When we recall that most of man's interests, in

his millions of years, have been motor, we can understand how great the change has been in a single century.

It is reasonable to suppose that changes are gradually taking place in the human body and mind to meet the requirements of the new life. Intense and prolonged mental activity is becoming better borne, there is perhaps less instinctive craving for great muscular activity, and better endurance of indoor life. In fact, there is every indication that a type is being produced, adapted to the sedentary life.

As is always the case when a type is being formed, variability is great and there are many departures from the normal. The nervously unfit, as we have already seen, is a product of the transition. These changes are not, however, abnormal as a whole, but are quite in the line of evolution. Our work is not to combat them, but to adjust ourselves to them.

Already there is a type of organism suited to the new life, and ill-adapted to the strenuous motor activity, and as little at home in such a life, as a warrior of the old days would be in a modern office. The motor type is still, perhaps, the most normal and best balanced,

but the sedentary man is rapidly coming to be a stable type.

These differences, we must know, are grounded in the most fundamental traits of body and mind, and a man of one temperament can no more change himself to the other than he can change one species of animal to another. Indeed there is almost as much difference between the pronounced active and the typical sensitive among human beings as between two varieties or species of animals.

By the change in our methods of work it is certain there has come both gain and loss. New diseases and disorders have been introduced. Sedentary life is hard on muscles, heart, and lungs. Mental ills follow upon physical restraint and inactivity. Something of the sense of individual freedom, which is a part of the active habit, has gone. Let adults look back upon childhood, and they will see that the feeling of freedom was greater than now; that the power of free and rapid movement gave an assurance of life and safety that was all too soon lost. This sense of freedom we are in danger of losing as a race, through our change from motor to sedentary life. Some-

thing must be done to prevent its further decline, or something must be put into its place. It is useless to cry, "Back to Nature!" Civilisation does not go backward, but relentlessly forward, and the human race must adjust itself as best it can. We must even modify our bodies, and change our deepest instincts, if necessary.

It is quite natural that popular belief should assert that the mental and nervous life is in itself dangerous to health, and that millions of men and women should go to work each day under protest, and with the belief that they are ruining their health and shortening life by sedentary work, when it is likely that they are better adapted to this life than to one of more strenuous motor activity.

It is in the belief that the mental life is dangerous to health that a vigorous motor habit is usually prescribed for those threatened by nervous breakdown. There is an old saying that when the health has been lost through the mind it must be regained through the muscles. This is but a partial truth, and therefore a dangerous one. It is quite as true that when the health has been lost through the muscles,

it must be regained through the mind. Thousands are now doing physical work, who are better adapted to, and need, more mental work. Nervous breakdown is now very common among farm classes, and there is more insanity among them than among any other class. This is due in part, perhaps, to the lack of mental and social elements in their lives, and to the fact that among the young in the country, ideals of city life have spread to destroy the peace of mind.

Mental work is not, of itself, dangerous to health, as the long, happy lives of many mental workers well prove. Both mental and physical work exhaust energy, and either can destroy the nervous forces, if improperly done. But merely changing from a mental to a motor worker will not save anyone from nervous disorder. Often both mental and physical strain thus go on together, and the last state is worse than the first. Uninteresting physical work, done merely to build up the body and to regain health, usually fails of the purpose, for strong interest is the only saring state of mind, and without this indispensable element health deteriorates.

Many must learn to be content with a life which is but little motor, and to know that it is a normal life, that most would be less perfect in health and happiness if a life of intense motor activity were now demanded of them. They must learn also what, that is essential to health, may be lost by such a life, and must resolutely set about adding these elements to their lives, in order to keep well. Every nervous worker has a personal problem of exercise and recreation. There are some general principles, but no general rule will help, unless it is individually modified and applied.

What can be done toward controlling the dangers of the nervous life by proper exercise? What are the dangers from too little, too much, or improper exercise? These are questions which everyone must answer in part for himself.

Exercise produces muscle, helps to control the production of fatty tissue, eliminates waste matter through skin and lungs, controls the circulation of the blood, strengthens heart and other internal organs. It controls excitation in the nervous system, thus prevents over-activity of mind, quiets the emotions, prevents mental confusion and indecision. Above all it keeps motor activity free, and the power of free movement creates a sense of mental freedom and power. Thus the sense of personality is sharpened, and the feeling of security strengthened. Exercise thus makes for optimism, self-confidence, and all the goods near and remote, that come from these uplifting states of mind.

But all these goods cannot be attained without carefully avoiding many ills readily brought on by a wrong motor life. The nervous life produces nervous systems peculiarly susceptible to poisoning from over-excitement by wrong or excessive motor activity. Energy in the alert, highly sensitised nervous system is less easily controlled than in the more stolid or better balanced motor type, and is therefore more readily exhausted. Poisons are more quickly produced, and are quicker to irritate and excite the mind. Excitement spreads more rapidly from one function to another.

Thus exercise, like food, may strengthen and stimulate, but it may also poison and excite the body. It is quite as important for the nervous worker to guard against too much or improper exercise as to provide for enough in his

day's routine. Many seem to think that the harder the mental work, the more exercise needed to offset its effects. This is far from true. Many are more exhausted by efforts to be physically strong through exercise than by their daily work. The mental and sedentary worker cannot afford to burn his candle at both ends. Many a man who has tried to correct his excessive mental life by strenuous out-ofdoor life has found his energy still further depleted instead of restored. Many young men severely exhaust their nervous energies by their ambition to have strong muscles, and it is safe to say that greater nervous exhaustion can be produced in the highly organised man, by a season of football, than by a year, or a whole college course, of a moderate amount of mental over-work

It can be said of us as a nation that we do not play enough light games. We make work of our play, if we play at all. Most mental workers need to play more games, and to learn to play them for the game and not merely for the exercise. If a game is merely endured for the sake of the benefit that can be derived from it, it will do but little good; for bodily

activity without mental enthusiasm is unnatural. Such exercise may be had even at great cost of nervous energy. Particularly, efforts to acquire skill in a vigorous game beyond one's natural limit is exhausting physically, and mentally harmful as well. Galton maintains that the limit of capacity is soon reached or indicated in any occupation, and rise above that natural limit is gained, if at all, like the steamer's extra knot, at a disproportionately great expenditure of energy. We tend to be too strongly competitive in whatever we do, and over-competition in games, especially among the young, must be regarded as a harmful spirit of our motor life.

For the nervous worker, gentle and prolonged exercise is likely to be better than violent and brief, and time consumed need not be regarded as lost. Of all forms of exercise, walking, under proper conditions, is by far the best. It can be regulated in so many ways to suit the needs of individuals that it is most useful of all resources. Walking for exercise should not be too fast, and should be free from the sense of hurry. The test of good is quick recovery from fatigue, and improved mental

control. Presumably if one has some interest or a variety of them that take him afield, better results can be obtained than when walking is done merely for exercise; but, on the other hand, walking is a deep and normal interest, and mere walking may become a passion. Walking up and down hill, through rough country, through woods, in fields, in cold and storm, all have their charms-and even city walking need not be lacking in zest, nor become routine or constitutional. One who has in addition to habits of walking, a love of fishing, hunting, or some special nature interest has of course some advantage, but none of these are really necessary. It is better not to take on artificial interests too conscientiously. The American, especially, is likely to take his interests, even his pleasures, too seriously. Idle walking, with attention lax, walking with a rhythmic stride, at an optimum gait, is the nervous worker's best exercise.

As to physical culture, there are so many systems, each with some good features, that one is bewildered if he tries to find the best, or only correct method. In fact, there is probably none greatly superior to all the rest, and

any good set of exercises, done properly, and faithfully persisted in, should do good. It will repay the nervous worker to study them and find something suited to his needs. For one can often greatly improve physical condition, mental control, and attitude toward life generally, by a little patient physical culture work. It requires no hardship nor severe exertion to train and harden the muscles, so that the body will no longer suffer from fatigue poisoning after slight exercise or over-work, and improvement can be made in many other ways.

The usual stumbling block in the way of acquiring the physical culture habit is the belief that exercise, to accomplish anything, must be severe and prolonged. Too much is undertaken, the work is found irksome or impossible, and is soon abandoned.

To acquire the physical culture habit, one should begin with very little. The work can best be done in the morning as a part of the routine preparations for the day. When a little is done, with zest, and is looked forward to with pleasure, the battle is won, for then more can gradually be added. Very little time is required; even fifteen minutes of light work

each morning will accomplish so much that no one can afford to omit it from his programme.

For the nervous worker, and especially for the nervously exhausted or ill-balanced, physical exercises must be light, restful, and free from excitement. There are many suitable plans, though most now in use seem unnecessarily artificial. One that was devised by the writer especially for purposes mentioned here can be used to advantage, modified, if it is necessary, to suit individual needs. It is intended to be economical of both time and energy. It is based upon a simple idea which can be briefly stated as follows:

During the history of man, a layer of accessory or fine movements has been superposed upon the fundamental, or large, coarse animal movements. These finer movements, especially of hand and eye, are connected with the work which most individuates man, while the fundamental movements are those of racial actions, still common to civilised and savage, and indeed to animals. The nervous, highly individuated worker, needs to lapse back to the racial level, and his physical exercises afford one op-

portunity for him to do this. His movements should be fundamental, free, rather than refined and skilful.

Now two great groups or kinds of muscles perform most of the animal movements; the flexors and extensors. If these are brought into play vigorously in a few typical movements, the whole body is exercised, and in a way that tends to quiet rather than to excite and exhaust the nervous system; and at the same time a good foundation is laid for finer and more skilful movements of game or occupation.

A body well-trained by a few minutes' practice of racial movements, kept up faithfully each day, should be able to undertake any ordinary movement of occupation or play without resulting fatigue intoxication, or lameness, and at any time be prepared for unusual muscular exertion, unless movements of a very exceptional nature are brought in; such as some of the movements of the forearm in tennis, or of the legs in horse-back riding.

Exercise can well begin with proper breathing, and this should be attended to throughout

the work. So much has been said lately about deep breathing that little needs to be added. It can best be practised at first lying flat upon the back in hed. If the windows of the room are open (as they should be) one may deepbreathe on first waking in the morning. If hands are placed on the sides, at the hollows above the hips and below the floating ribs, and breathing is made to inflate the body there, one is breathing deeply. By practising while lying down, some troublesome dizziness may be avoided. Breathing should be done slowly, with prolonged and full inspiration, and rather quick expiration. After a little practice, thirty inspirations may be settled upon as sufficient for a preliminary morning exercise.

The morning exercises should be taken in the open air, as on a veranda, and clothing should be loose enough to allow free movements, and only just sufficient in warmth to prevent chill. If very little is done at first nothing will be lost. The purpose is to make the work seem pleasant, and to establish the exercise habit. If one should do nothing more than form the habit of going out into the fresh air and stretching the body vigorously a few times

each morning, he would find that he had accomplished something. Once established, the exercise habit should never be lost, no matter how much other motor activity occurs during the day. To make the exercise a part of the day's work, never omitting a day, is the only way to keep the habit.

Ten movements will be described in some detail, which make, if not a liberal physical education, a system that will be found adequate as a routine exercise. It can be guaranteed to anyone who will practise them faithfully for six months, that body and mind will be much improved.

1. Stand erect, weight forward on balls of the feet. Bend the head slowly backward and forward, breathing deeply, but not with too much attention directed to the breathing movements. The movement can gradually be made more rhythmic and free, and to include more muscles of the trunk. By imagining resistance, muscles can be balanced against one another, but there should not be great exertion, as if to make the muscles strong, and the movement must always be swinging, and not too tense. When well practised, thirty double

movements may be settled upon as sufficient. Thirty movements will do also for the remaining exercises.

- 2. Stand as before. Strike out forward with each hand alternately as in boxing, reaching as far forward as possible. When properly done, it will be found that the whole body participates in the movement. The strong part of the blow should come at the end, and not at the beginning of the stroke. Back and legs should participate strongly in the movement. Vigorously done, the benefit in body balance and mental tone will soon be felt.
- 3. A movement as in rowing. Bend the body forward, reaching out with both hands as far as possible; then bend backward, drawing back both hands as in rowing, putting the weight at the end of the stroke, and imagining resistance.
- 4. Raising the hands as far above the head as possible, standing on tiptoe, grasp an imaginary rope with both hands, and pull downward until the hands are as far down as possible without bending the body. There should be a feeling of lifting the body upward by the arms, and a strong pull. Breathing at full depth should accompany the rising movement.

- 5. Stand with the hands at the sides, and raise the arms forward to the level of the shoulders. Then spread the arms, and bring them as far back as possible. From this position raise them to the highest point that can be reached above the head, at the same time rising to full height upon the toes, and breathing deeply. Lower the arms to the sides, making the widest possible circle. The movement should gradually become a single connected movement, at each part the hands describing the widest possible circle. There will be a feeling of stretching the body, and a sensation of lightness. Imagine swimming or flying.
- 6. Stand with hands at the sides and bend the body forward and backward as far as possible. The movement must be swinging, the body stretched to full length.
- 7. Rise alternately upon toes and heels, making a swinging movement, bending the body slightly forward and back to keep the balance.
- 8. Raise the legs alternately as in climbing stairs, keeping the body vertical, and bringing the knees up to the greatest possible height. Imagine climbing.
  - 9. Standing well balanced, hend the knees,

lowering the body, keeping the back straight. Rise on the toes as the body is lowered. This movement may be too severe for the unexercised, and may be omitted at first, or altogether, if it causes distress; though it is an excellent exercise for heart and lungs, and should be acquired if possible. It may be modified by bending the knees but slightly, raising the heels from the floor.

10. The stationary run. Make movements as in running, maintaining a fixed position in the room, or moving slowly forward. The body should be supported lightly on the toes, and one foot must leave the floor before the other returns. The height of the rise above the floor, and the rapidity of the movement can be varied to suit the needs of the individual.

If each of these movements is performed thirty times (in movements like the boxing movement counting the movement of the two arms as one) it will be found that about twenty minutes have been consumed. The exercises should leave a sense of increased vigour, and if they are well done, will be looked forward to as one of the pleasures of the day. The body will gain in a feeling of lightness and freedom

of movement, flesh will be hardened, more muscular effort can be made without fatigue or strain, breathing will be deepened, mental tone improved, gait made more elastic—and all for fifteen minutes' work, which if entered into properly will be a pleasure as well.

To conclude the subject of motor training, we need to be reminded that the purpose of it is not to restore the pristine life of nature, nor to reach the greatest possible power and development of muscles, but to acquire that degree of strength and quality of vitality best suited to the particular task we have to perform. For most sedentary workers, the ideal must not be to attain the greatest degree of skill in any one direction, nor to have the greatest amount of motor activity possible in the day's routine, but to make exercise serve to control energy and prolong the working life. One must learn to live economically, to make his plays and exercise count for health and vitality.

Especially it must be impressed upon all nervous workers that motor activity demands energy. One cannot expend his forces indiscriminately in play, however enjoyable it may

be, without using energy. A moderate amount of relaxing and but little exciting exercise will compensate the ills of the sedentary life. Such a life of restrained activity is not abnormal unless the whole process of development of modern industrial life is a disease.

### SUGGESTIONS FOR READING.

There is now a vast literature upon the subject of exercise, covering many different phases of the subject. A few titles are suggested, which will give one an entrance into the subject and will also indicate still wider reading.

- D. A. Sargent: Physical Education.
- T. D. Stempel: Physical Exercises for Girls. Dudley and Kellor: Athletic Games in the Education of Women.
  - S. Smiles: Physical Education of the Young.
  - H. I. Hancock: The Physical Culture Life.
- J. H. Bancroft: Games for the Playground, Home, School, and Gymnasium.
- A. Dodworth: Dancing and its Relations to Education and Social Life.
- J. H. McCurdy: A Bibliography of Physical Education.

# CHAPTER XII

### SLEEP AND REST

PROBABLY the majority of adult nervous workers suffer more or less from imperfect sleep, and lack of rest, or at least from the belief that they do. The demands of the nervous life excite and exhaust the nerves beyond the point of fatigue or control at which perfect sleep can be enjoyed. Perhaps to recall briefly the purposes of sleep and rest and their relations to activity will throw light upon the practical problem. Sleep serves two purposes: it restores the energy lost during the previous waking period, and it prevents further waste, by shortening the hours of activity and cutting off exhausting excitations. It is the latter function which is often overlooked.

In our present complex life, when twentyfour hours seem all too short to accomplish all that one would wish, the incitement to activity is constant during waking hours, and temptation is strong to prolong the day beyond the proper limit, just as far as can be done without suffering from immediately felt exhaustion. This is of course not an economic method of living. One must not only discover how much sleep or rest will barely restore the energy used the day before, but he must find out how many hours of waking life he can manage safely on the average, and can use to the best advantage. It is certainly better to be up and alert twelve hours, with energies well in hand, than to spread inadequate powers and interests over a period of sixteen hours.

As to sleeplessness, it can be said safely that most people sleep enough, but few learn how to rest when awake. We need to recall that the upright position is a late acquirement in the race, and indeed an anomaly in animal life. In many respects the body is but ill suited to the upright position, whether standing or sitting, and some diseases can be traced to the mechanical disadvantage under which organs work in this position. The most fundamental form of rest is therefore the reclining position. Inasmuch as the fate of many nervous workers is determined by the number of hours they are willing or able to lie down it will pay to con-

sider this. An astonishing amount of sleeplessness can be borne, if necessary, if one can learn to rest when awake, and thus the amount of energy spent during the waking hours be reduced.

Thousands who feel themselves on the danger line from overwork and over-wrought minds are using artificial means of producing sleep, when it is quite unnecessary, if they would learn the facts about sleep and relaxation. Sleeplessness is usually caused by one or the other of two conditions: over-excitement of the mind, or nervous exhaustion. Of physical means of correcting these conditions, a prolonged warm or hot bath at bedtime is one of the very best, especially when the condition is due to simple excitement. When exhaustion is the cause, stimulation by hot nutritious drinks in considerable quantity, and application of heat to the body will be most likely to succeed.

Most mental methods of inducing sleep, such as counting and the like, are, to say the least, stupid and unnatural. It is better to stay awake a little longer than to resort to artificial means of any kind, for at least the time of

wakefulness can be spent profitably. Thinking, rather than effort not to think, naturally precedes sleep, and if the mind is habituated to take up suitable trains of thought, and the body is well relaxed, sleep will usually take care of itself. Therefore, to think nothing about sleep, but to fall into some useful or pleasant train of thought, is the best way to induce it. One must go to bed prepared to have a comfortable night whether he sleeps or not. As a rule, one will not be much the worse for such a sleepless night. Furthermore great nerve strains and exhaustion may be suffered without causing sleeplessness of any consequence, if the right attitude towards sleep is taken.

Sleep should be in the open air, and happily both the normal and the sick are now being convinced that windows should be freely open at night. Fear of dampness of the night air, that has made so many sleep all their lives in airtight rooms, is absurd. Nothing is damper than the exhaled breath of the body, and the condition of the window panes of a closed bedroom on a cold morning, after Jack Frost has been tracing his much admired figures on the glass, sufficiently shows what has been going

on. The closed room, slept in, is the damp room, and the room open to the outside air is dry. A cold room is better than a warm one. but one should not suffer from cold. The tired body cannot afford to heat the atmosphere, and it is foolish to waste energy by enduring too great cold. The sense of cold, however, is made up of at least two factors, as we have already seen, and the skin sense of cold, which is likely to be over-sensitive in the nervous, can and should be educated. One can train the body not to feel the cold so sensitively, and some effort to that end is worth while. The Indian of the cold Western plains, protected only by his loose blanket, does not suffer from cold, even with arms and legs exposed to the weather. The warm blanket about the body, with its loose folds keeping the air contained and warm, conserves well the body heat. He has educated his skin sense, and he is "all face." As much exposure as can be endured comfortably, after the skin sense is hardened, is desirable. One should not sleep tucked up closely in bed, with only the face protruding, and with no fresh air reaching the body. One may poison himself with his own body exhalations, or from the retention of heat in the body, even when the breathed air is abundant and pure. Men died in the Black Hole of Calcutta, with faces exposed to the outer air.

No other aspect of personal hygiene seems to have been more neglected than sleeping, and our beds, even now, are behind most other conveniences of life, in suitability for their purpose. One should sleep with the head low, best without pillow. If there is discomfort from so lying, a pillow may be used on first lying down, and then be discarded. Sometimes it is said that lying with the head low causes "too much blood to flow to the head." This is not true—in fact the opposite result follows. With the head low, pressure of blood in the brain is reduced. Lying with the head high is a part of our nervous tension, for it indicates lack of power to relax.

There is now happily a growing interest in sleeping out-of-doors, advocated at first for the tubercular patient, but now coming to be used widely in the treatment of acute diseases, in nervous troubles, and, in fact, growing in popularity among the well. The plan of providing houses with sleeping porches seems

ideal. If bedroom or dressing-room opens freely upon a porch one can sleep out- or indoors, being able to move his bed without inconvenience. Some who could not well manage to sleep out at all times could thus compromise in bad weather, or for other reasons, and sleep under the open sky whenever possible.

Yet one who has not slept out in the open, on the ground, has missed interesting experiences. There is a wholesomeness about the night air, and the dews of the morning, and even the creeping and crawling things. The changes in the night wind, the fluctuation of light, the night sounds, all soothe and balance the mind. The first time one stays out he may not sleep much, but it is worth while to stay awake and see and hear the world fall asleep and rise again. One who does not yet know the charms of sleeping out should read Stevenson's chapter, A Night in the Pines in Travels With a Donkey.

Next to the night's rest the best restorative is the mid-day nap. Many will say that it is impossible to sleep in the daytime, or even to rest quietly in bed. But a little practice will be likely to accomplish it. A half hour's rest

after luncheon will achieve wonders for tired mind and body. It seems not only actually restorative out of all proportion to the time spent, but it serves the very useful purpose of breaking the day's consciousness in two, causing the morning's excitements to subside. It so helps to concentrate the energies, and, as it were, clears the deck for new action. In many cases of those living near the danger line the afternoon nap is quite surely the deciding factor. To cite a single instance—a hard working physician of nervous temperament. who has successfully carried for many years the burden of an hereditary disease, declares that he owes his success more to his invariable custom of taking a daily mid-day nap than to any other practice.

To learn to fall asleep in the daytime it is necessary, first of all, to learn to lie still. Usually when one lies down after exciting activity, at a time of day when the mind and body are not accustomed to relax, mental action tends to increase, the muscles persist in contracting, and one is too restless to stay in bed. This is the time to stay. One should not try to enforce stillness, nor endeavour not to

think, but perhaps for a few minutes assume a partially reclining attitude, then gradually relax, at length allowing the body to stretch out perfectly flat, still, and relaxed. When one can stay restfully in this position the battle is won, whether sleep is induced or not. If sleep comes, so much the better, but one can rest, lying with the muscular system detached, as it were, from the senses. Perfect rest is obtained by perfect stillness. To move at all, especially when about to fall asleep, will break the spell, knit up muscles and brain again, and start off the co-ordinated activity one is trying to rest from. A very poor substitute for this kind of rest is mere lying down, or reclining to read, however light or entertaining the book. This has its place too, as a restorative, but it should not take the place of the mid-day nap.

Much is heard lately about relaxation, and various rest cults and methods of gaining power through repose are put before us. They are deserving of attention. Much energy is wasted through inability to relax those parts of mind or body not in use. Excitement and tension spread, and there is mental confusion, and lack of muscular control. The still and

self-controlled person has many advantages, and though the nervous will gain little by trying to imitate him by holding himself still, he can indirectly learn to control movements of mind and body.

A beginning can be made with special attention to relaxed breathing. Shallow breathing is due to muscle tension and inhibition. Deep breathing is relaxed breathing, as for example in sleep, when the muscles most connected with mind are detached from the sensory control.

Study may be made, too, of the proper method of performing some fundamental movement and the inhibitions which impede it can be ferreted out and removed. In walking, for example, if attention is drawn quickly to what is going on in the muscles, one is likely to find that the whole body is tense. Instead of moving by a swinging motion from the hips, with long steps, and loose-hanging arms, steps are short and quick, arms are moving rigidly, the cane perhaps clenched stiffly in the hand, shoulders braced, and the lower part of the chest held firm and inflexible. This is a wasteful spending of energies, and the effort of the body to compensate is prevented by

shutting off the supply of oxygen by shallow and inhibited breathing. When this condition is observed, it is time to relax. Fall apart, settle into the loose-jointed and swinging gait of the gypsy or savage. Let go the accessory muscles and move by the fundamental muscles.

By practising such methods of relaxation. taking care not to torture oneself by too incessant consciousness of movements, the habit of relaxation can be acquired, though of course any single method of curing the ills of tension will be but a small part of the effort directed to this end. Tension lies at the very root of the whole trouble of the nervous life. The ideas that lie behind these strains and tensions must also be attacked. One is tense, perhaps, in walking, because he is carrying in his mind a visual picture of the place he wishes to reach, rather than letting the sensations of the moment absorb him. His body is adjusted, not to taking the next step, but to jumping all the intervening distance. And this habit of idea is in turn a product of a chronic mood or emotion which must be attacked at the root.

If the habit is formed of falling apart, mentally and physically, at times of fatigue or strain, another hygienic resource will have been added. One may lie down for a moment, or frequently turn the eyes and the mind into the long-range position. This habit, which all practice instinctively more or less, can be extended and regulated.

In general, the nervous worker should take advantage of every opportunity to relax. He should sit down when it is possible, especially when talking. Close the eyes now and again, and shut off for a minute the excitations of light. Teach the mind to fall apart like the body in relaxation, by letting it lapse into revery. Cultivate the habit of complete idleness. Doing nothing is often the best use of time. Even ideas sprout in such a medium. Little things leak into the soul worth inviting. The mind may be accustomed, in its spare moments, to become de-individuated, to live the life of the universal, and thus to gain power for its own tasks.

### SUGGESTIONS FOR READING.

H. Brown: Sleep and Sleeplessness.W. Hutchinson: Instinct and Health.

Walton: Why Worry?

## CHAPTER XIII

#### WORK

Work is salvation. Doing something mightily, with all one's heart, with complete loyalty, something worth while, something useful to one's fellow beings, is the backbone of life.

This duty and pleasure must not be foregone by anyone, even the invalid, though of course work must be proportionate to strength. Work utilises forces which will otherwise destroy the mind, and to live idly or in the spirit of indifference, is to invite a flood of unworthy impulses, to live hard and fast, because emotionally, and to allow a crop of weeds to grow in and destroy the garden where useful activities should flourish.

When work is adjusted to a man, or a man to his work, the work should take on some of the qualities of play. One should be able to look forward to work with pleasure, as he does to play. He should even find more pleasure in work than in play. If work is habitually done

with dread, if there is no outlook in it, nor inspiration, it will pay to consider well how a re-adjustment can be made, how it may be seen, perhaps, in some new light, how some natural impulse or ambition may be brought in to enliven and invigorate it. Many forms of work, in themselves apparently dreary, and done with weariness, may prove to be attractive when the man has once put himself fully into it in the right way; when he has become loyal to his task and not merely attentive to it.

A man who loves his work, be he well or ill, who has work with an outlook, work about which he can enthuse, is fortunate indeed, whatever else he may lack. And he who has not is to be pitied, whatever his possessions may be. If he is also half-ill, nervously strained, his burden is doubly hard. A man has a right to have, and it is his duty to seek, that which is searched for by all animal life, and which is the condition of progress and effectiveness everywhere, an environment to which he is to a reasonable extent adapted. If he cannot adapt himself to conditions, so that he live a normal life, one in which he can do service

without excessive sacrifice of self, he should if possible, speaking in biological terms, seek a new habitat. Service and comfort are not inimical to one another. The best service is done by those who are adapted to their task and love it. It is one's duty to be comfortable.

Work, both mental and physical, and especially mental work, is far less wearing than many suppose. Work, properly done, is restorative in its effects. It makes the body and mind capable of normal rest, and aids in the creation and storing of energy in the body. Energy must be wisely spent in normal activity in order that more may be obtained, and the physiological functions are not well performed unless mind and body are well aroused and co-ordinated in active, serious work.

It is more often the attitude toward work, the emotional accompaniments of it, than the work itself, which causes breakdown. If work is done only to finish it, and to get to the next step; if there is feverish pursuit of an end, if work is done in disloyalty, or with lack of confidence in one's ability to do it or in its value; if it is done with eagerness to do too much at once, then work, like play done under

the same conditions, may be the cause of strain. But Work, properly done, is normal to the core, even the hardest work, and the longest hours. It favours long life, and healthy old age.

Of course advice to take one's work in the right spirit is more easy to give than to take. Indeed, the greatest problem of life is to acquire the habit of working most economically and effectively, in the right spirit, and all the resources of hygiene, mental and physical, must be brought to bear to help to solve it.

Several practical suggestions may be made, which, though commonplace, are fundamental to the hygiene of mental work.

Work must be arranged systematically with reference to the natural rhythms of energy of the individual. Each person has characteristic modes of fatigue and restoration of energy, and other traits of physiological rhythms peculiar to himself, and these must be taken into account, in planning one's work.

Work must be considered as a part of a larger whole, the day's régime, and other parts of the day must be properly adjusted to the working periods.

One must learn to work with absorption in

the day at hand; to get enjoyment in the work each hour. If the parts are not worth while, and satisfying, one may well doubt the value of the whole. One of the prevalent causes of breakdown, especially in America, is discontent with the work in hand.

Work must be made social in every way possible. It must not be done by the individual with reference to himself alone, but for others. It must be done with faith in its value, and in its fitness to be acceptable to others. If it is not so done, it is not normal, and in the end it will injure health.

Although systematic work, hygienically done, well within one's power, must be the basis of normal achievement, no one can escape times of unhygienic labour. There must come occasions, when, from inner or outer cause, perhaps a long period of intense work, or work under conditions of strain, must be endured. One is usually tempted to regard such periods as dangerous to health. Considered from the standpoint of our text books of physiology, this is doubtless the case. But physiology, as we have had reason to see before, has its limitations. We do not know the ultimate effects

in the body of such strains and exhaustions. Even great strain and long continued overwork often seem to leave no harmful effects. and to be physically and mentally beneficial, when endured in the interest of something of moral or practical importance. The stimulus of work well done is itself very great, and one often finds that his time of supposed misfortune has been one of cure or uplifting of all the forces. One may find that he has been living in a too limited circle of habits, that a state of "second breath" has been attained, which shows him a new reservoir of power hitherto unknown to him. An interesting case is that of Sara Bernhardt, related in her Memoirs. She tells that, being at the point of a breakdown, during a severe season, she was goaded on to a supreme and reckless effort, because of unjust treatment. To her surprise, she soon found that, instead of ruining her health as she expected, her strength improved, she finished the season stronger than when she began, and throughout life has lived, she thinks, because of this experience, on a higher level of power. Such crises are not infrequent among both

the ill and the well, and although we as yet know but little about the physiological causes of the changed state, it is certain that new powers are often released by forcing body or mind to unaccustomed hardships. Work done at the highest pressure, overturning apparently all the principles of good hygiene, work done even in extreme suffering, may eventually result beneficially, if the outcome is good.

More harmful than hard work is the habit of not stopping work when the day's task is done. This is in part due to the character of the work we do, but far more to the wrong idea underlying it. The natural tendency of mind and body is to relax and rest after toil, and if rest does not come, it is usually because an unsatisfied emotion is at work driving the mind on. Such persistence of mental action, the mixing of work with recreation, and even with sleep, which, one may say, is the prevailing state of the nervous worker, is a cause of breakdowns. The mind is not allowed to rest, and prepare, by change of content, to approach the next day's work with fresh interest, but comes to its morning task jaded, full of excitement and distraction or disgust. Thousands know so little what it would be like to stop work when it is done, that they expect no other condition than mental confusion, and never look for the cause.

Though everyone who works nervously should have a well chosen equipment of means of controlling the mind after the work of the day is over, there is no radical cure of this almost universal evil except training of the ideals. One must find precisely the emotions which are preventing complete rest of the mind, what it is he is unconsciously striving for futilely (for it is usually the thwarted or unattainable purpose that is at the bottom of all worry), and he must attack that idea at the fountain head.

Of course the resources of hygiene, mental and physical, must be directed toward the same end. One should have a good armory of methods of nervous control. Little interests should be cultivated, odds and ends of useful and pleasant thinking nursed and made use of. Indeed he who has not at command a good repertory of tried means of mental control, suited to different degrees or forms of over-

excitement of the mind, has not protected himself against disaster.

SUGGESTIONS FOR READING.

L. Gulick: Mind and Work,



## CHAPTER XIV

## RECREATION

RECREATION IS a broad, interesting, and important problem of personal hygiene. Recreation is more than rest, or change of mind, or pleasure indulged in for the purpose of restoring the energies for the next day's work. It is more than a problem of hygiene as usually conceived, for the recreational life must contain many elements needed by man for his full rounded development, happiness, and efficiency. If we work eight hours, rest eight, and leave eight for recreation, according to the old rule, it is important to consider well what shall be done in a full third of life.

Stated briefly, the purpose of recreation is twofold. Somewhat abstractly stated, the ideal recreational life puts the man into the attitude of any man, and of all men. That is, in recreation, one relaxes, reduces his tensions, casts off his late acquirements, becomes a child

or a savage, drops to a lower level where he has interests and performs actions common to all, in which he receives in his own activities the momentum and sympathy of interest common to a great number. Recreation brings into play the general life, the life of the savage and of the common man. It removes for the time being the tensions, the precision, and individuality of the special calling; it de-individuates, in other words. On this plane one must live a part of the time, exercising those forces which are otherwise unused, and which must be exercised and trained because they are fundamental to all other activities.

But recreation does more than this. It deindividuates in another way. Man has become highly variable, and specialised. Men are machines which do one thing well. Each, in his own intense and special activity, tends to be estranged from the inner life of all others. Recreation is a means of universalising life. In recreation a man ideally takes for his field world-wide experience. He goes everywhere, actually, or in idea, becomes and does everything on a plane of low tension, with, for the most part, an unpractical and detached interest. This is his compensation for being an individual. In his life of recreation potentialities are made to function, struggling and offending interests and ambitions are allowed to flourish harmlessly, and in a way to help balance and control rather than to antagonise the main interest.

So conceived, the great importance of the recreational problem for the nervous life should be evident. We can see that it strikes at the roots of it—the qualities of intensity and individuation which lie beneath all nervous strain and disorder. And it is the failure to appreciate the importance of definitely directed and controlled recreational life, which, in large measure, accounts for the lack of insight into the hygiene of the nervous life, and also the difficulty of treating nervous disorders. We are taught to work, we sleep and rest more or less instinctively, but the other third of life receives but little attention or direction from any source. Neither school nor home aids the child in organising his recreational interests, and it is only in a belated play movement, which is now coming to be a foremost interest in public education, that we see the first satisfying recognition of the fundamental importance of directing and organising the life of recreation.

Everyone needs an avocation. This should be a kind of half-way station between the working life, and the de-individuated life of recreation. It should be restful, carried on at low tension, with a minimum of strain after expertness. Yet it should have value for someone, even be productive and profitable. If one's work is lacking in social elements, the avocation must make amends for this. It should broaden his sense of personality, make one more completely a self. In many cases it will be kept in the background as a substitute for the vocation, should need arise.

For avocation there is a wide range from which to choose, for the "world is so full of a number of things," that, if we cannot all be "as happy as kings," we at least need not be without interests. Indeed we are fortunate to live in a time when there are so many new occupations and organised interests. One can mention the many philanthropic and social movements, either in the form of activity, or of study, in which one's opinions or acts may

be of value. Then there are the manual occupations, of which there are so many, both indoor and out-allowing so many forms and degrees of activity, suited to those whose work is not sufficiently motor. There may be special study of some kind, disconnected from the day's work and balancing it; something that can be made to issue in a practical result. Of less worth are such interests as collecting, as of books or coins. Breeding of animals, or a minor scientific enquiry may be mentioned as suited to many. For others, light literary work, for which there is now such a demand; fiction, special writing, (perhaps accompanied by the practice of photography) biography, and the like. Even some game, in which one easily becomes expert, may have qualities suited for an avocation, if its points of social contact are wide enough; if one can contribute something toward the betterment of the game, or assist in its proper conduct. In all avocational activity there should be a strong social factor. If the work that is undertaken has its societies and journals, so much the better.

Coming now to recreational interests, vari-

ous forms may be considered with reference to satisfying one or the other of the great recreational motives.

First, the relaxations. The ideal game uses the fundamental parts of both body and mind. All our games tend to become too expert and technical. Precision and expertness, rules and conditions, are too much emphasised, and that which is hap-hazard, joyous, and free, is subordinated too much. The ideal relaxation must be social in a natural way, having those qualities of freedom, abandon, and joyousness characteristic of the child and the savage. It need not be violent, nor necessarily motor at all. What is essential is the spirit, the mood, and not the content; and whatever induces these will suit the purpose. Everyone should have a variety of such interests, varied to suit time of life and opportunity.

Of all the games for adults, judged from the present standpoint, golf appears to be one of the very best. If attention is not too strongly directed to perfection of strokes, and winning, it is almost an ideal game to counteract the evils of the nervous life. Of course competition is a normal interest, and one does not wish

even to play too badly. A game must be played with some degree of skill in order to furnish proper social elements, and emotional exhilarations. But a happy mean must be struck between bungling and too refined playing, if the game is to be considered as a relaxation. If, in any game, only a moderate degree of skill can be acquired with great effort, one should try something he can do better.

Among many idle occupations, rich in relaxational qualities, tramping must be mentioned as especially suited to the nervous worker. Many who have few opportunities for sport, or whose early training in play was neglected, must depend almost entirely upon walking for outdoor exercise. One must learn how to make walking truly relaxational; that is, how to cultivate the mood without which it is merely exercise. This can be done, even without accessory interests, such as fishing and the like, which make it ideally a recreation. The spirit of harmony with out-of-doors can be cultivated. The imagination can be trained. Cold and storm, dust and wind, the smell of woods and water, can all be invited to suggest the mood

that is wanted, if the mind is allowed to be passive.

Occupations of other kinds, centred about house and indoors, must be made by some to yield the desired relaxation. Gardening, the care of animals, even the mildest strolling in field and road, can be used to cultivate the spirit of harmony with nature, and with the common life, which is so much needed by all.

Even if one is shut out from these, the same end must be accomplished vicariously. Reading may be made to supply the mind with some of the elements required. Magazines of outdoor life, stories of woods and sea, of all free active life, will serve to put the mind into the mood, and supply true relaxational elements.

Turning to purely indoor amusements, it can be said that the much played cards furnish but few of the factors of true recreation, and the prevalence of these games shows our lack of resources and lack of attention to the problem. Chance is a normal motive, surely, but our excessive playing of cards is a poor substitute for real recreation. Card games have their small uses, and because everyone needs social contact, it may be necessary to be equipped with some degree of skill in them, unless we wish to set ourselves the task of being teachers of better things. Billiards and similar games, which require calculation, and are richer in æsthetic elements, are better, from this point of view.

Music is one of the best of all recreations. It de-individuates, as does all art, and is a language common to all. It is therefore rich in social elements, and yet is free from some of the features of the social life which are most fatiguing and unnatural. Moods of common interest, sympathy, and understanding are induced in listeners and performers, in a way unexcelled by any of the recreations. In dancing, too, there are possibilities of enrichment of the recreational life, in ways but little accomplished by the conventional forms.

Turning now to the aspect of recreation as universal experience, there is again to be seen a very unsatisfactory understanding of a great need. However limited the life, however great the need of close specialisation of interest, one can and must include in his recreational life this general interest, if he is to be a complete person. Unconsciously we all try to do so, but

more can be done even by those who are much limited, than might be believed at first.

Breadth of interest, at low pressure, is now the ideal. Beginning with a few minutes each day with the newspaper, one has the basis for universal attention. It should be a part of the day's routine to review, in the most impersonal and detached manner possible, the comedies and tragedies of the world, even the minor and local receiving some attention. Of course other motives may accompany such a task, but its recreational function needs to be understood.

Wider reading in current affairs and opinion is but an extension of this same motive, and this mode of universalising oneself, whatever else it may accomplish, performs an hygienic function, in correcting the ills of specialisation. The reading of history and biography plays a similar part in the mental economy. As does also a wide and heterogeneous social contact, peculiarly necessary in our day of specialisation of interests and estrangement of individuals from one another, in their occupational and other interests.

The value of a wide range of small interests and abilities, which fit into the small places of life, should not be overlooked, in their hygienic aspects. Odds and ends of motor ability, and of all sorts of interests, should be allowed to grow or be cultivated. All fields of knowledge should receive some attention, even though it be in the smallest way, so that life is touched at all possible points. However limited one's opportunity, and however passive the interest must be, no life is complete that does not maintain this attitude toward all experience.

The functions of travel must be mentioned in this connexion. Travel, like geography for the school child, serves the purpose of acquainting one with all sorts and conditions of human purposes. Not only the attention but the emotional reaction is distributed over a wide field, sympathies are widened without being too much intensified, and without demanding focalised expression. The drama and fiction in part fill a similar place in the recreational life.

He who is much limited must not narrow his range, but must modify his means of securing the end. He must remember that the mood is quite as important as the experience. He need not fly to the far East in order to travel. Even

the little excursion to the neighbouring town is something, if it establishes a certain state of mind that is necessary for complete mental health. And by the printed page one may go to the ends of space and time.

Revery has its place in the mental economy, for it performs a health-giving function. The habit of wandering through space and time, of living impersonally in all points of view, is balancing and compensating to the limited life of the special worker. By fancy, one may acquire goods which may seem at first thought entirely denied to many. Even the trip abroad, when stripped of its ostentations, may be seen to consist of factors, most of which are at hand to the one limited in purse, time, and energy.

To touch for a moment upon another theme—even the religious life must be considered from the recreational point of view. For in this attitude the de-individuating is most complete. The individual for the time surrenders his individuality, and becomes lost in the whole, becomes a part of the whole meaning of life. All wide moral and social sympathies have the

same effect, psychologically considered. Aside from their social values they are hygienic resources of the individual, and are a part of the recreational life.



## CHAPTER XV

## THE EMOTIONS

THE emotions: fear, anger, jealousy, love, pity, and the other strong states of feeling common to man, are the source not only of most that is pleasant in life, but also of most of the unpleasantness, physical and mental. Not events, we can say, but our emotional attitudes toward them are the sources of our ills.

This is peculiarly true of the ills of the nervous life. Behind most of the undesirable nervous phenomena in society and in individuals, and even underlying many of the physical ills, will be found wrong ideas. And behind every idea which is obstinate and persistent will be found a desire or an emotion. Whether it be muscular tension, restlessness, even physical pain, one must look first of all for an idea. If the idea is found and can be controlled, the trouble will disappear. This is the fact upon which all such statements as that nervousness is due to fault of character are based. If this

is true, of course the control of the emotions is one of the great central problems of mental hygiene.

Modern life has been producing a type of man peculiarly susceptible from infancy to emotional stress and disorder. It has created more and more desirable goods, more capacity for heterogeneous interests, and yet has demanded greater concentration and specialisation. There must be constantly, as one develops, a pushing aside of interests, control of the feelings, sacrifice of ideals. The child passes rapidly through changing scenes, interests fail to be properly organised into that hierarchy which the perfect balance between work and recreation requires. So mental growth is often to some extent abnormal; unfinished beginnings of ambitions, suppressed feelings, unnatural experiences linger in the imperfectly organised mind and furnish the motive power for many an undesirable idea and physical ill.

In many other ways the emotions enter into the nervous life. They are so intimately bound up with all our ills and difficulties that it is necessary for anyone, who undertakes to study his personal problem, to understand the general psychology and physiology of these states.

It is safe to assert that whenever there is an unsatisfactory nervous condition, there is always emotional disturbance. It may be of the nature of cause or of result, or both, any emotional disturbance tending to set up a vicious circle of ills, from which there sometimes seems no escape. The emotions poison and exhaust the body, and the poisoned and exhausted tissues furnish the condition for still more intense emotional reactions. Sometimes it is a general excess of excitability of the emotions, sometimes some one, or again a single effect of emotion—some fear, antipathy, regret—which lies at the bottom of nervous disorder or temperament. No one escapes entirely the wear and tear of the bad emotions. Everyone is poisoned, literally, in body and in mind, by his imperfect emotional adjustment to the conditions of life.

The hygienic problem of the emotions is twofold, having both a physical and a mental aspect. But before the means of control are considered one must make some attempt to understand the emotional life. In a sense, the understanding of the emotions can thus be said to be the beginning of the control of them. For it is well known that emotion evaporates when it is calmly examined. Here the dangers of introspection are turned to good at the outset.

In order to understand the emotions, one must first see that there is more in the individual than appears in his ordinary practical waking consciousness; much that he has never learned, but that is an heritage from ancestors, animal and human. The emotion is a part of the process of adjustment of the body to conditions that surround us. Stimulus sets off reaction without the intervention of consciousness, and the mental events we call emotions are the results of these changes in the body. Emotions, and it is likely all feelings whatever, are parts of a process of adjustment of the body to meet practical situations—or at least are adjustments that have once been useful in these situations. The enormous power of these processes will be understood when one recalls that it is by the emotions or instincts that all animal life is and has been preserved.

Our emotions are expressions of the most fundamental impulses of self-preservation.

Now it is unquestionably true that these emotional adjustments are but partially adapted to our present modes of life. That is so apparent that it needs almost no argument. Even in the most normal conditions of health we are often angry or fearful out of proportion to cause or need, and sometimes beside the point altogether, so far as practical behaviour is concerned. Our emotional life is imperfect. We have worries out of reason, self-accusation, pity, that gets no expression in conduct, has no use whatever, and often hinders practical action.

In the ill-adjustment of the emotions to practical life we all share, well or ill. And this exposure of the emotions need cause no surprise. The body is no better off, for it is full of parts and functions that make trouble because of their imperfections. Helmholtz used to say that if his mechanic were to make for him a machine so imperfect as the human eye, he should send it back for correction. It is the same with many other parts of the body. We are very imperfectly adapted in form to

the upright position. Many diseases are produced by these imperfections of structure. The internal organs, the skeleton and muscles are still "four-footed." The veins and other structures often suffer from doing work for which their construction is not suited.

Such knowledge about human nature is essential for all, especially for the young, who are likely to find the emotional life an enigma. One's emotions are so peculiarly personal, that it is at this point abnormal isolation of the individual arises. Individualities are magnified, emotional traits concealed, in the belief that they are exceptional or abnormal. This is a very prevalent source of strain in the mental life. The young person feels but does not understand the disparity between the primitive life of instinct and emotion which stirs so powerfully within him, and the ideals which he obtains from his environment, tries to make himself measure up to impossible standards, and thus sets up strain in the emotional sphere which may become a lifelong attitude. We see it in one form in the "New England conscience."

One must learn enough about human nature not to expect too much of himself; must know that, whatever imperfection he may have, he is in a numerous company, and that there are none so fortunate as not to be more or less out of harmony in the emotional life. One must learn, too, that the emotions are not to be trusted implicitly as guides to conduct. Much energy is wasted in trying to act in accord with the exorbitant demands of emotion, when knowledge about its true status would enable one to discount it and take it at its true value. If feelings were educated as carefully as the intellect usually is in school and home these prevalent causes of isolation and strain would not exist.

Knowledge about human nature is one of the most essential parts of the equipment of the young. Self-study should be sensibly undertaken by all, with a willingness to accept frankly one's limitations, to recognise the fact that there are both good and bad traits in every character, and that one must do the best possible with the traits he has. Systematic study of the parts of psychology that treat of the

emotions would be helpful to anyone. A wide knowledge of biography, and especially of autobiography, is also needed.

When the emotional life is too intense, and unpleasant emotions constantly interfere with progress and health, as is often the case, it is well to remember the double nature of these states: that the mental can be treated physically as well as mentally. The emotions become first a problem in physical hygiene.

To understand the physical means of control of the emotions, one must see that they are in one sense a physical mechanism. The machine in which they are produced must be understood, before it can be cared for properly. We have already seen, in other connexions, that the circulatory system, heart and blood vessels, and the nervous mechanisms controlling them, are especially connected with the emotional life. Whatever strengthens and controls this system affects the emotional control. So those means already mentioned of preventing autointoxication, of removing poisons that irritate the tissues, and increase their readiness of response: bathing in sun, cold air, and water, which tone and strengthen blood vessels; exercise: all such hygienic methods directly affect the emotional life, because they are applied to the mechanism which performs the emotional acts. Sensible treatment of the body as a machine is therefore the first resource in the education of the emotions.

We have seen, too, that to discover ideas and feelings is in part to cure or control them. This thought can be carried further, and we can say that more than mere knowledge on the part of the individual is required. It may seem inconsistent to say, as we have done, that these parts of the mental life, which have been called the most common and fundamental, shared by animals and all races of men, are at the same time the basis of nearly all excessive individualism, and that the proper control of this individualism is the centre of all cures of the nervous life. But there is no contradiction. Though the emotions are universally experienced and understood, they are not shared, as is knowledge. We live a double life: a public life of senses and actions, and a private life of feelings. In philosophic terms, a life of description, and a life of appreciation. We cannot directly describe or communicate feelings. As individuals

become differentiated, the difference in the fundamental traits of the emotional life become the foundation of temperament and of estrangement of individuals from one another. When these instincts and feelings are seen to be out of harmony with ideals which are taught us, they are still further driven back into the individuality. They are not suppressed, however, but appear as underground forces, as it were, permeating all the habits, directing interests, and colouring all thoughts and acts.

Heaven has been defined, philosophically, as the place where we shall communicate directly through the life of appreciation, as we do now in the life of description. However this may be, education of the feelings in a way to overcome all social estrangement and excessive individualism, would help to create a heaven on earth, in which there would be no morbid nervous life.

The reserve in the emotional life is of course in part necessary, but it is also often excessive, and almost criminal. The young are allowed to grow up without self-understanding. The most distressing ills of the emotions are permitted to develop without the slightest atten-

tion, partly because they are not understood, and in part because of the reticence of our idealism to enter into the cruder animal parts of the mental life. So anger, fear, sexual emotion and the affections are allowed to make havor of life.

This idea of social appreciation has direct application to the teaching of the young, and to the cure of nervous disorders. It can be called the confessional method. The emotional life of the growing child and adolescent must be kept open and the inner workings of feeling understood both by the child, and by his teachers and parents. Especially the parent, who often enters least of all into the life of appreciation of his child, must take heed. Wrong habits of the emotional life can be cured by proper social sharing of the emotions, and even the most severe ills in nervous disorders can thus be entirely cured.

Another method of control of the emotions can be called the utilisation method. Emotion is aborted action. It needs outlet into the practical life. One who knows he is susceptible to any strong emotion must provide a means of utilising that emotion as a force to

do something. This is true of the bad as well as of the good emotions. The good emotion, if unutilised, weakens the will and becomes dangerous to the moral life. The bad emotion. unexpressed or unused, is an irritant and a waste. Aristotle's theory of the tragedy is well known. He believes its value consists in its power to serve as a substitute or outlet for the bad emotions, which we all feel but cannot express in our practical life. This principle does not go far enough. The bad emotions must not merely be drafted off harmlessly. They must be utilised, transformed into forces. They may become the motive and the power of artistic expression, as is well known. They find their way, in the genius, into music, art, and poetry. And in the common life they must not be wasted. They must be turned to account in the practical life. Avocation, recreation, work itself may be made to take up the emotional forces and utilise them for practical ends. Chronic fear, anger, irritation, and disappointments can thus be treated, used as forces rather than combatted by main strength.

An illustration will make this clear. Many, if not most, children have an excess of the

spirit of envy and competition about trivial possessions and advantages. In part this spirit is taken up and utilised in the marking system of the school, which turns the emotion into action useful to the child. This emotion is still further transformed when, as is done in French schools, the child is made to compete with himself; when he is marked not for how much he excels his neighbour, but for his improvement upon his own record.

Application of these general principles must now be made to a few of the emotional states most often implicated in the ills of the nervous life. Fear, worry, anger, sexual emotion, jealousy, depression, should be spoken of in detail, though no new principles need be added, and one may easily derive the application from what has already been said. In another chapter more attention will be given to suggestion and auto-suggestion, as means of controlling emotion.

Fear, in many forms, tends to increase in modern life. The decline of motor activities, the sensitising of the nervous system, increases the liability to fear. It may take the form of chronic timidity, colouring the whole life; or the effect of fright or shock, especially in early childhood may work with other morbid nervous elements to make the mind susceptible to special fears. The fear ideas often work beneath consciousness, causing waste of energy, strain, undue excitement of bodily functions, and affect interests and thoughts. Even in cases in which there is general timidity, expressed in worrying and ill-adjustment of the mind to all the future, it is sometimes a special fear that is at work, and if this root idea can be understood and removed, the strain will be overcome.

The best time to begin the treatment of fear is before it has developed. Every child should be studied with reference to his fears, timidity, and aversions, and every precaution be made to prevent lodgment of fright and shock in the child's mind; for thus foundations are often laid, to do grave harm later, when the mind is put under strain.

In all depressive states—fear, melancholy, worry, depression—it must be remembered that there is likely to be a root idea which must be ferreted out and controlled. Self-analysis is the best weapon with which to meet these ills,

if a radical cure is to be made. A well-arranged recreational life will also do much for the mind which is highly sensitised to depressive emotions; for if consciousness is kept full of normal interests, well organised, it can be swept clean of most that is undesirable. All physical means of controlling these states must of course be taken, for it is poor economy to fight by the mind that which can perhaps be subdued by a dose of medicine.

Chronic irritability, the habit of resenting, social sensitiveness, jealousy, envy, and a long train of related ills that inhabit the anger region of the mind make another problem of the personal life, which must often be solved. The same principles apply as to the fear group, for self-knowledge is the rational cure. Much trouble arises from mental indolence. One is willing to allow the exaggerated natural response of feeling to stand for one's real attitude towards events, and to suffer and make others suffer in consequence, when a minute's mental work would enable one to discount these feelings. Education is at fault here, for self-knowledge is not taught at a time when habits of control could be established. Many ills, caught in the

act of formation by the critical intelligence prove not to be ills at all, but to be capable of being turned to immediate account in many ways. A very little of acceptance of such a philosophy of life will greatly reduce the waste of energy in most lives.

Here it must be said that no one, however ill or limited, must allow himself to assume the right to attitudes toward life to which the normal are not entitled. To do so is the greatest mistake he can possibly make. The same motives which keep the normal steady must guide him. He must sacrifice his natural but wasteful and selfish feelings, for the purpose of doing something effectively that is worth while. To do this is more difficult than for the well-balanced, but the problem is not different in kind for normal and ill.

As soon as possible every child should be given correct, wisely chosen information about the sexual life. More should be added as the mind is ready for it. The habits and ideas must constantly be watched, so that no morbid sex habits or worries may remain in the dark. This is sometimes no easy matter for parents and teachers, but as it is one of the most im-

portant services that can possibly be done for the mind of the child it will pay to do it well. In many cases the sexual causes and accompaniments of the nervous life are severe only because of the excessive isolation they cause. and what remains after this barrier is broken down will be likely to be found of little consequence, or to soon disappear altogether. The great force of the sexual life, the prevalence, indeed the almost universality of its disturbance in the nervous life, and the insidious way in which these produce, so unnecessarily, the very ills that all the resources of nervous hygiene can later with difficulty cope with, makes this one of the most important of all problems of the nervous life. The only possibility for a normal development of the emotions is in the harmonious and sympathetic relations of the child to parents. If there is excessive fear or reserve on the part of the child, or indifference on the part of the parent, the emotional life, and especially the sexual life, is sure to suffer and to be to some extent incomplete or wrong. In the family, the estrangements of the nervous life must be completely overcome. The duty of understanding their children rests

upon parents to-day as never before in the history of civilisation.

### SUGGESTIONS FOR READING.

The reading of Darwin and other writers upon evolution makes the best introduction to the study of the emotions. After this, should be read especially such work as that of President G. Stanley Hall on fear, anger, and other emotions (various articles in the American Journal of Psychology). If these are not accessible, appropriate chapters in any psychology which takes the genetic point of view, such as Kirkpatrick's Introduction to Genetic Psychology, will help. Ribot's Psychology of the Emotions is a systematic and somewhat difficult work covering most of the topics of the theory of the emotions.

There are many books dealing in one way or another with the education and control of the emotions. Books like Walton's Why Worry and similar popular treatises are helpful. Much that is in many ways helpful will be found in the literature of the new mental healing movements, if one is able to separate the good from the bad.

### CHAPTER XVI

#### THE INTELLECT

THE mind is a tool or machine with which we perform a certain task. It is reasonable to say that no other tool is used with so little understanding of its proper use or construction, nor allowed to suffer so much from neglect and abuse. The nervous life demands better knowledge about the mind than most possess.

First of all one must know that the mind is lawful in every part and function. It is natural to think that, because the mind is so complex and variable from moment to moment everything in it runs by chance or the will and caprice of the individual. But nothing could be further from the truth. The laws of the mind are as inexorable as the laws of nature.

The failure to understand that the mind is lawful is the source of much strain. We expect too much of it, think that it can be made to work in any way, and take no pains to understand its most economical ways of operation.

We cannot of course undertake to tell in detail what the laws of mind are, nor how the mind must be trained to work most economically. That would require a treatise upon psychology—and another upon education. But a few fundamental thoughts can be suggested as types of the problems of mental control which are most important to the nervous life.

The mind grows, from infancy up, seemingly in the most roundabout, illogical, and almost perverse way. It is a patchwork of disconnected parts, each developing according to its own laws. Gradually this mental stream, or bundle of functions, begins to be organised and adjusted to practical life, brought into order by the interests which form the centre of the personality. Each one of us has vastly more mind than he ever uses, or could use. Interest is selective, and brings some degree of order into a part of experience most essential for life. The mind of everyone, however wise and self-governed he may be, is full of unused fragments and uncontrolled ideas, and it is only because a certain portion of thought can be marshalled to follow

out a definite line of purpose, that anyone is sane at all. It is because of an exaggerated idea of mental training very prevalent among us that there is much unnecessary and futile training, drill, and self-torture, to make the mind do that for which it was not intended by nature. In general, it can be said that when interests develop normally, the mind is trained to its work without great and distressing effort. The properly fed mind trains itself, and the prevailing idea of discipline is certainly largely wrong. The constant effort to do that which is difficult in order to train the mind, or to keep it in trim, is for the most part mistaken effort.

Similar thoughts apply to the subject of memory. There is much wasted effort to train this function, as is shown by the numerous memory systems that have been invented to help the memory keep pace with the demand for facts. Many lament that they have forgotten nearly all they learned at school, that they cannot remember what they read. As a matter of fact, the limitation of memory is a wise provision for ordering the mind. Interest naturally selects for remembrance those facts most essential to a subject, and what cannot easily

be remembered had better be forgotten or at the most written, and kept for reference.

The mind is at best a very imperfect mechanism. The amateur mental worker does not consider how imperfect even the best of minds must be. He sees the great result, but he does not know the commonplace contents of these minds, the eccentricities, lack of mental control, the trial and error, by which the great result has been attained.

It is the selective power of great interest which makes the mind effective. The mechanism of most minds is quite good enough to accomplish even great results, if it is properly managed. What is usually lacking is the coordinating power of some great interest, dominating and organising all the rest. If one's interests are educated, even the naturally stupid mind can be made to do good work. Definite, expert knowledge, accumulated by means of a dominant interest, easily and naturally, is the mark of a good mind, rather than the possession of mental faculties trained by severe effort, and self-direction. One must not attempt at least to do in one way that which nature has decided should be done in another.

One often hears the lament, "If I could only concentrate!" We hear of systems which teach attention and concentration. Again the same error of mental training arises. Usually the method prescribed is to select some intrinsically disagreeable task and force the mind to attend to it continuously. Or to train oneself to attend in the midst of distraction. But one should know that even the most perfect attention is not continuous nor strained. It flits to and fro, away from, but always back to the subject. It is not forced back but comes back of itself. When interest is aroused, there is no problem of concentration. The difficulty is rather to keep the mind away from a subject than to direct it to it.

Perhaps the habit of mind wandering needs more training than that of attention. We have said that everyone has far more mind than he ever uses for practical purposes. It is at least of interest to travel over one's mental possessions now and then, to indulge in revery and dreams, to re-live all sorts of experience, and pry into all the content of the mind. The imagination needs free range. One must become acquainted with the resources of his own

mind and such a task is more than a mere pastime. For thus one may constantly feed his intelligence from the almost inexhaustible supply of mind which is the possession of everyone. It is from such free, uncontrolled activity of the mind that the intelligence in the first instance arises, and it is to this we must return when the mind is overworked. It is not to be despised and suppressed, but cultivated and enjoyed.

Other mental functions might be analysed in the same way to discover the points of susceptibility to strain, and to hygienic control. The same thought applies at every turn. The mind grows and functions according to laws which are unchangeable and are inherent in its mechanism. To try to make the mind do what is not natural to it, or to work in artificial ways is to produce strain. Working in its own way, at the degree of pressure and in the manner that is optimal for the individual, it is equal to the severest tasks and will sometimes endure astonishing hardships before it will break. Therefore knowledge of these laws of the mind is essential to every nervous worker.

Everyone must know also his own mental

traits and peculiarities, so that he can work most economically. Each must learn how to use to the best advantage his strong functions, and to favour his weak ones. In a word, we must study and understand the tool with which we work, at least as well as we would expect to know the use of any other tool or machine which we try to use. That most of us never give thought to the most economic way of producing a result with the mind is due to the fact that we are not taught to know the mind and respect it. We grow up with the peculiarly contemptuous attitude toward the mental life, which familiarity with it breeds. Mental energy is wasted to a degree which would seem scandalous if its value were estimated in dollars and cents, and which is equalled only by the abandon with which we give away and waste that other most precious gift of nature—Time.

### SUGGESTIONS FOR READING.

Any good text-book of psychology; e. g., James, Baldwin, Thorndike, Calkins, Angell, Royce.



# CHAPTER XVII

### SUGGESTION AND MENTAL HEALING

ONE of the most astonishing developments of our time is the idea of mental healing, or the control of the body by the mind. Not only in the new mind cures and faith cults is this shown, but in the most conservative schools of the regular physicians, the idea of mental healing has taken deep hold.

This movement has a wider significance than its application to the treatment of diseases. Mind has awakened to the fact that it has created within the body new weaknesses and ills, and that it must from its own resources compensate the loss occasioned by its own rapid development. The result is a natural outcome, too, of over-individuation. As life becomes more individual, there is an unconscious longing to draw upon that which is more common and general to balance the strains of isolation and self-direction. It is not only cure for diseases

that is wanted, but aid in all departments of life.

It is natural, too, that this half-understood impulse should clothe itself in mystical forms at first, that hypothetical sub-conscious selves and universal principles and forces should be assumed, and that the attitude should be semireligious. This must always be a first step in such a new field of thought. The need of aid from half-understood forces outside the individual consciousness will for a long time, if not always, assume a religious form.

No one at all informed can doubt that there is something in the new psycho-therapy; that diseases can be cured by treatment of the mind, and that the method has a wide applicability in education and in other practical fields. It would be interesting and important to take up in detail the history of mental healing cults, and to discover thus, if possible, the common, and therefore presumably the true elements in them all. We should suppose, too, if there is a power to cure the ill, inherent in mind, it may be employed quite as usefully, if not more so, in preventing illness, in increasing the powers of the well, and in education generally. We might

well doubt the value of any such idea of medicine that does not thus apply to the normal life. It is natural for each healing cult to believe that it alone has the secret of the universe, and that mental healers should war upon one another. When a method is used that is but dimly understood, a certain amount of fanaticism is necessary in order to sustain belief. If adherents were to take the tolerant and judicial attitude, their efficiency, as one could see at a glance, would be in great measure gone.

If a satisfactory study of mental healing were to be made, a long list of present and past systems would need investigation: from the religious miracle down to the latest form of medical suggestion. The shrines, Christian Science, the faith cures, new thought systems, the more definite psycho-therapy of the Emmanuel and similar movements, the personal magnetism methods, hypnotic practices of the pseudophysicians, the psychological methods practised by regular physicians—would all be included.

If we ask what, precisely, is the nature of the most fundamental common element of all these systems we shall certainly come to the conclu-

sion that the central thought in them all is belief. Each is first of all a means of establishing belief that cure or success is to follow the treatment. They may contain much more, but this is the centre. And they all, even the most scientific medical psycho-analysis demand this belief, which is in some degree a surrender of the individuality. Whether the sick patient surrenders his case entirely into the hands of the absent treating "scientist," or for a half hour allows the mind to be passive to an examining physician, the case is the same. The conscious individuality no longer undertakes to control the situation, but abdicates to an outer influence.

Saying this is not by any means condemning any of these systems. If there were nothing at all in the objective forces in which they demand belief, yet they would cure, if they could establish belief and cause surrender of the individuality. If there is any beneficent curative agency in nature at all, and any method can make the individual cease antagonising it, something is accomplished. Organisation, numbers of adherents, authority, and sanction are all powerful instruments of cure, and all

have their proper place. One is most benefited, usually, by something in which he has entire confidence. Whether any of these systems cure, as they claim, when there is not trust in some degree, we need not discuss. If they do, this is not their chief hold—but rather it is upon the believing they must for the most part operate.

As to the existence of a curative force or unconscious self or other mysterious agency, not understood by man, it is of little consequence from our present point of view. The cures are brought about through the power of an idea working in a natural way. The effect of an idea is so plain and evident in every action that we need not worry about mysterious powers it may be supposed to have or to release. The evident power of the idea is all that is needed. Provided the idea is strong enough to have dynamic power, or to control the action of opposing ideas that have harmful effects, cure or other desired result will be likely to follow.

If half of one's illness is due to misdirected idea, to constant effort to do by consciousness what nature is quite capable of doing, and is doing all the time, if the individual but keep his inhibiting, self-conscious ideas out of the way, it can readily be seen that to relinquish the idea is to remove the obstacle to cure. That ideas are at the bottom of many of the ills of the nervous life we have had every reason to believe.

Something needs to be said about the physiology of the cures made by suggestion, lest one think they are entirely idea. Something is made to take place in the body by an idea, however aroused. Hypnotism has shown how great the power of the idea may be in the control of physiological processes. We know, too, that the brain is capable of far greater control than our ordinary waking life indicates. Memory can be roused for facts apparently long since forgotten, and the whole region of the "unconscious" is now becoming open to inspection through methods of psycho-analysis and the like. We know that systems of nerve connexions exist in the brain in all stages of detachment and unification. Powers lurk beneath the surface, not controllable by ordinary waking consciousness: the power, for example, to control the circulation of the blood, to re-

member all sorts of apparently forgotten facts. There are submerged experiences, old foreign bodies, subdued emotions that have been pressed out of the waking life: skeletons in the closet, fears, all capable of controlling the machine in which they exist, without the intention of the mind. Suggestion, or any other method of implanting a strong idea, and associating it with these submerged ideas can bring them together, into harmony with other contents of the mind, raise them to the surface, so to speak, so that they can be drained off, reasoned away, or can be controlled by the idea that is now so strongly attached to them. These methods are not different in kind from the ordinary methods of self-control, but they can be made more precise and effective, more forcible, when they are enforced by strong belief. Belief, suggestibility, therefore, are states or attitudes of the mind which especially favour the entrance of the idea into the unconscious regions of the mind; but they are no more mysterious than any other mental process or attitude.

We must repeat that there is nothing mysterious about suggestion, and its effect differs from that of any other mode of mental action, only in the circumstance or condition in which it works. Suggestion affords a means of outer control of the mind and is often able to accomplish what voluntary effort cannot. We are constantly reminded of the power of the outer impressions upon the mind. We can be relieved and be made glad by change of weather, by the hearing of pleasant news. We are constantly uplifted by ideas which come in upon us, in ways that sheer force of inner control cannot accomplish. On the strength of the emphatic assurance of a physician, for example, a sick patient can perhaps at once do what before was impossible. There is nothing mysterious about it. An idea has been made more dynamic through re-inforcement by belief. He has become convinced that he can act, and the inhibiting idea or fear has been surrendered, and the action takes place. When we speak of the unconscious we do not mean another mind different from that of the waking life; we mean simply that which is not now in mind and which can be brought to mind. It differs in no particular from anything forgotten that can be recalled.

Outer suggestions can, of course, also injure and destroy, physically and mentally. We are often the prey, in a real way, to the evil suggestions that constantly attack us. The highly sensitive nervous system is at the mercy of any untoward event. It can be depressed and injured, and must often wait for some outside force to restore it. This is true of the normal mind, as well as of the sick mind. It is impossible for anyone to resist the play of ideas upon the condition of the body. Whether we can do more or less, or sometimes whether we can do anything at all, often depends upon the suggestions that come from without, which we cannot control.

Having cleared up a little of the mystery, it is hoped, which sometimes attaches to these new modes of mental cure, we are in a better position to see how the forces of suggestion can be controlled and utilised for the protection of the nervous life, and the cure of its ills.

Whether or not one will gain anything by becoming a member of an organisation whose purpose is, psychologically described, supplying suggestion, will depend upon temperament, education, and purposes in life. If one is a student, and open-minded, it is difficult to see how any harp with one string can satisfy him.

If one is in great need of social sanction and confirmation of his beliefs, and his ideas can be made dynamic only by his going with the flock, there is an argument for his association with those who strongly believe, and who show by their acts that they are helped by their belief. One can understand how many are cured in a real way by the various faith and thought systems, how they may be changed from ineffective, self-conscious sufferers to useful workers, by the redistribution of their energies, and by the proper direction of interests and attention, that normal suggestions and influences bring about. The suffering individual is over-powered by the more normal and more dynamic idea from without, and he is carried along and started in a new direction.

It is evident that in the methods which we have called in a general way suggestion there is a resource for the nervous life. Ideas or forces are at hand, which, though not ordinarily organised nor consciously used by all, are yet capable of being to a certain extent commanded and used. It will repay one to study these forces, to see how they can be brought to bear upon his own life.

It is within everyone's power to invite from many sources ideas which suggest strength, health, activity, optimism, and balance. They are ready at hand in nature, art, personality, even in one's own consciousness. Music, for example, has suggestive powers, of use to the nervous life. By music, individuality can be made less intense, emotions controlled, courage stimulated, and the mind played upon in many other ways. Music conveys to the mind in subtle ways the meaning of the world and belief in its harmony, and order, and suggests moods hygienic for the nervous life.

In nature there are ideas controllable to the needs of the human individual, and subject to his command. Mountains, sea, even a wide outlook upon hills are tonic to the nervous system in a very real way.

The suggestive power of temperament constitutes another agent, which can be controlled and used to a certain extent by all. If the social life were an exact science, we might be able to choose companionship for the sick with reference to particular needs. Association, even at intervals and for a short time, with a person possessed of the qualities needed is helpful,

sometimes to a remarkable extent, to the nervous mind. The noisy boisterous optimist, the "fool" optimist, the reckless spender of energy have nothing to offer, but the quiet, confident, serene mind possesses a power over the less perfectly balanced mind. The possession of such a temperament is the secret of the success of many a physician and clergyman, and the lack of it is the source of the failure of others who have all the intellectual equipment one could ask. The power to convey dynamic ideas works below the region of self-conscious thinking and of the communication of thoughts by words; one must be, as well as think and know, in order to have suggestive power for good.

The great success of some hospitals in the treatment of chronic ills is due to the fact that they can control by suggestion the environment of the patient. They bring to bear in a studied way, perhaps, the elements needed, and by the constant play of these upon the mind supply motive power to exhausted wills and bodies, and cure while the patient's individuality remains passive and suggestible.

Besides a knowledge of suggestion, such as has been indicated, everyone should know the

possibilities of auto-suggestion, and have at command the resources of good there are in it. Many of the health systems teach auto-suggestion, and although their claims for a particular formula or method are often absurd, and based upon a puerile philosophy, there is something in auto-suggestion for everyday normal hygiene.

Auto-suggestion is simply a mode of setting the mind over against itself, or one part against another, so that the idea comes with the authority of an external force. It is not necessary to believe that in such practices one comes in touch with sub-conscious powers or with some mysterious universal principle. The mechanism of the process is quite simple to understand, and is the same as ordinary suggestion.

Auto-suggestion can be practised in several ways. An illustration or two will make them clear. For example, when some troublesome mental or physical limitation stands in the way of accomplishment, or the mind feels unequal to a task, or something greatly to be desired seems unattainable, and eagerness to work is inhibited by the fear of failure, the method of auto-suggestion can be tried to advantage. Select a favourable time, when the mind is open

to suggestion, or when already suggestions similar in nature to those desired are coming in: when, perhaps, one is at the height of wellbeing during the day, as when taking exercises out-of-doors or when quite relaxed and comfortable. Put yourself into the attitude, physical and mental, of belief, and declare to yourself the desired end. "To-morrow, I shall be better," "This feared thing will no longer be feared," "This troublesome thing is of no importance," "This purpose will be attained." One need not expect the suggestion to take the place of other effort, but its purpose is to prepare the mind for effort, to establish the attitude of faith or belief, without which effort is unnatural. When one falls into a wasteful, troublesome state of mind, when emotion, mood, or train of thought exhaust energy, the same device can be resorted to. One may declare to himself that, "This is forbidden," or "This is futile," and so the motive for control may be re-inforced by authority of the more rational self, speaking as from without.

Self-analysis allows a somewhat more refined application of the method of auto-suggestion. We have seen that at the bottom of most of the

ills of the nervous life—its tensions, moods, irritations, dissatisfactions, isolations—there are ideas, and that behind the ideas are emotions. Self-analysis is a search for these root ideas, which distort the life, pervert energy, and cause so much waste. When such an idea has been found, auto-suggestion is a ready means to help control it. One who has performed selfanalysis knows that the nervous state often seems very remote from the root idea, but that it is nevertheless a product of it. When the state is experienced, the root idea must be attacked by strong suggestions that antagonise it. One may prepare himself for a day in which tension is likely to be high by asserting to himself as emphatically as he can the control of the root idea. Whether the trouble be a chronic tendency to hurry, to social irritation, to worry, the method of auto-suggestion is applicable.

When there is a tendency to rehearse misfortunes, or wrongs, which is always done with waste of energy, the method of auto-suggestion can be applied. Instead of driving the trouble out of the mind, and holding it down, as it were, by main strength, thus using energy in two di-

rections to produce a zero, the trouble must be thought out completely in all its relations, its most favourable aspects examined, to see whether it has not already been turned to use, and if not, how it may be. If such an examination does not dispel the trouble and it still persists, this most favourable aspect of it may be accepted as a symbol of the trouble itself, and whenever the old series of associations appears, the symbol, the new idea, must be sharply introduced into the mind.

At this point, too, is seen the method of converting wrong emotions into motives for good action. Whenever the old emotion arises, it must immediately be connected in mind with the idea of the most effective manner in which it may be turned to practical use. If—to illustrate—the trouble be a failure, as in examination, or otherwise, immediately the emotion must be turned into an incentive to work, instead of being allowed to be submerged as regret. If it be the thought of an injury or wrong, instead of allowing the impulse to revenge to work futilely among the associations in the mind, some active idea must be put into its

place; some idea by which one may proceed to fortify himself against a similar attack, or make amends to his self-respect for the past.

Of course such methods are not put forward as discoveries or as cures for all the ills of the emotional life. They are used by everyone in a way, but they need to be more fully understood, their psychology known, especially the close relation of all these simple devices of control to the hypnotic and suggestion methods generally. They are full of practical possibilities, and should be included in the repertory of means of self-control and cure, by all who must fight the nervous life.

An interesting instance of the use of the method of control just described is to be found in the diary of the philosopher Kant. The words occur, "Remember to forget Lampe." Lampe was Kant's servant, and his death seems to have caused much emotional distress to his master. Kant hit upon the method of auto-suggestion to relieve him of his gnawing pain. What he did, and precisely how he managed, by remembering, to forget, he does not explain, but we can infer from his mental

habits that it consisted in rationalising his emotion by some such method as has been described.

These few reflections must serve by way of introduction to a very large theme, one which can profitably be investigated further by anyone. Perhaps it would have been better if precautions had been set in a little stronger light. For in no other field of present day thought is there so much absurdity, bad faith, ignorance and superstition as in mental healing. One can be assured that there is no one system which contains the truth upon which one's salvation and welfare depend. It would be astonishing if such were the case, and it would put upon everyone a hunt for a needle in a haymow, that does not seem quite in accord with the way Providence has set the problem of the individual for him. It is likely that all the necessary elements to work a cure of ills, or to control the mind most effectively, lie at hand to everyone, and that each may attend to his own salvation with confidence in the result if he is patient and rational. To go about the world, expecting some easy system to turn up which will make a different person of one, as

many seem now to do, is, to say the least, a disspiriting occupation. The mind is not so simple that it can thus be made over by a formula. To control the mind, the whole life of the individual must be ordered, and one must have at command all the resources of hygiene, mental and physical.

#### SUGGESTIONS FOR READING.

To understand fully the principles which underlie mental healing it would be necessary to know much about psychology, and also something about the examination and treatment of nervous diseases as practised in regular medicine.

There are many books on the subject of psycho-therapy well worth reading, which do not demand a great amount of expert knowledge. Some are popular or intended for the amateur. Münsterberg's Psycho-therapy is the most serious attempt to inform the public about the subject, and should be read by everyone. Dr. Worcester of the Emmanuel movement has also written about the subject in a way to be intelligible to anyone, and his book, Religion and Medicine shows well what is being done

in the more serious fields of mental treatment. If more technical knowledge is wished, and there is ability and willingness to enter into psychological questions, the writings of Professor Sigmund Freud, some of which have now been translated into English, can be recommended. They will show the wonderful skill which is now being used by psychologists and psychological neurologists in penetrating into the sub-conscious regions of the mind, and bringing to light its hidden contents. Freud's Hysteria and other Psycho-Neuroses although difficult to read, is not entirely out of the reach of the amateur, and will teach the principles upon which the psychological physicians are now at work.

Some good work on the subject of hypnotism will help one to understand the psychology of suggestion and kindred topics. Moll's *Hypnotism*, though now perhaps superseded in some points of theory, is still suitable for the purpose.

One can hardly escape nowadays some reading of the new thought and other literature which floods magazines and newspapers. It is a pity that so much that is practical and en-

couraging should be mixed with such bad philosophy, but one must learn to find the useful and disregard the false and puerile in the theory. Such magazines as Progress and the Nautilus, which represent types of new-thought practice for success, health, and culture, may be mentioned as worth study, but it is unfortunate for anyone to come to them for his first insight into philosophy. The impression obtained from the first hour of reading such literature, that one now understands all the secrets of the universe, is not stimulating to enquiry in philosophy. Yet we must not overlook the kernel of truth and the great earnestness of many of these searchings after power and health, and the excellent help many of them have given to many in the guidance of the practical life.



# CHAPTER XVIII

#### THE WIDER VIEW

WE are now in a position to see more clearly. and in a broader way, the whole problem of the nervous life: the philosophy, so to speak, of its causes and its control. We have seen at every turn that the relation of the individual to his world tends to change as society becomes complex, and that the means of control of the harmful results of this normal development are not yet fully worked out for society or for the individual. The individual, in our present condition of education and social life, is likely to grow up in abnormal isolation from his fellows and from nature. The world seems alien to him, to be of a nature different from his own, and perhaps unfriendly to him. At the worst, individuality may become the cause of the greatest pain and tragedy. The over-burdening sense of loneliness of it may drive the sufferer on to pessimism and despair, as it did Schopenhauer, yet all the time he may be more and more fearful of losing that individuality.

All the way along we have seen that whatever tends to break down the sharp confines of the individuality, to rest it, or lose it even for a moment, to merge it in the whole; anything which teaches one to see those most individual parts of the self, the emotions, its pleasure and its pains, as common in meaning and possession, the sharing of mental states, all these are hygienic and therapeutic resources in the actual control of the nervous life, and the cure of its diseases. The problem of nervous health is one, not merely of physical welfare—of digestion, exercise, or any or all of the physical functions, or even of the mental faculties—but it is a problem of the adjustment of the individual as a whole to his world.

All those systems which are successful in treating the nervously weak are founded upon some method of bringing the patient into contact with a reality larger and deeper than his own life. This is the effort of all those systems of suggestion that lead the individual to seek in the world some force, subliminal self, or over-self in which he can strongly believe, and

from which he can draw energy and receive support. Whether or not just such a reality as is postulated in any case actually exists at all, the limited life is expanded and benefited by believing strongly that it does exist, and that it is in intimate contact with the life of the individual.

This does not mean that it makes no difference at all what one believes, if it contains the proper psychological elements. It does make a difference, for what one must give up in order to cure himself of ills, protect himself from dangers, or secure a desired good, is of the very highest importance. Whether cure and safety are worth while at all, if the intellect must be deceived and stultified by cheap philosophy and crude mysticism, may be doubted. And it may be questioned, too, whether such cures are really cures at all. If one must believe that the individual is a mere shadow, or appearance, something to be lost entirely in the universal, as "rivers are lost in the ocean," to quote a famous mystic; and if one, acting upon this belief, protects himself by surrendering to the passive life, becoming dependent upon authority, believing that pain and sickness are unreal,

and that there is nothing to combat but idea—it may well be maintained that it would be better to remain an invalid throughout life. One would have no right to purchase freedom from ills at this cost. One must see the world as it is, and participate in its struggle and work. Not to do this is to sacrifice the most essential part of life.

What this larger whole is: what is the nature of the world with which the individual must come into normal relations—the mysterious other self or over-self which all the mind cure systems postulate—may now be asked. We shall come nearest to an answer by examining the net result of the history of philosophy. If philosophy, the reasoned knowledge about the world, shows anything at all, it clearly indicates this: We tend at every turn to come upon meaning in the world. Matter, unknown things, all substances and forces, disappear as science approaches the verities. By whatever approach we come, through the physical or through the mental sciences, we find a world which appears not different in kind from man's own activities. If it is to be understood at all, unless it is to be considered chaotic in its es-

sence, and totally unintelligible to us, we must believe the world has, indeed is, meaning to the core. It would be strange indeed if the lawfulness which we perceive in the stars and in all physical things should end or become exhausted before it comes to living nature and to man. And it would be absurd to believe, in the face of the evidences of the mental sciences, that it does. Indeed, a conception of the world as a reasonable and lawful whole need not be taken on faith at all. The mechanism of meaning and purpose is evident in every life. As accomplished purpose it comes every day. We see the remote effects of acts working together to produce ends, which, though unsought by any individual, are by every token rational and planned. We need not be content merely to admire and wonder at the ways of Providence. They are open to the examination of the critical. We can submit them to the same search, by the same methods, that we pursue in any scientific investigation, and we must abide by the result in the same way.

That which religion so often asks us to take purely upon faith, and the pseudo-philosophy bids us lay hold of by a strange formula or rite, proves to be no mysterious force that must be extorted from the Universe or cajoled or invoked by incantation; but it is in direct evidence on every hand, inside and outside the life of each individual. There is every reasonable evidence of it in life, and in formal philosophy we reach the same conclusion. It seems as though anyone who thinks at all about the universe must be convinced of its essential reasonableness, its connexion with, and interest in the individual, and the individual's true participation in its work. If one cannot find such a truth in any religious revelation, he can find it with his naked eye. Because its purposes often seem vast and unknown, the individual need not feel isolated and lonely in it, but there should quite as reasonably arise in him a sense of warmth and nearness. For what is capable of extending so far, ought to be able also to be near and intelligible. And that it is near and intelligible we have every proof. We can see it at work every moment.

But for all this evidence of both the practical and the reflective life, there is a prevalent lack of faith throughout society; a lack of the very kind of faith that is most needed to hold in check

all the ills of the nervous life, and its excessive individualism. Belief, dynamic belief, which shall relieve the individual of his excessive isolation, comes hard to the nervous life. Lack of faith is a part of the disorder. It is not a mere wrong belief, a matter of having been wrongly educated, of having been told what is not true. Distrust of that which is outside the individual, and which cannot be directly controlled by selfconscious thought, is a part of our modern individualism. Each feels that he must in every particular control every cause which enters into his life. He is not willing nor able to see what must be left to the reasonableness of the whole. Energy is used in trying to marshal all the elements of the future, rather than in living one day at a time, selecting the most essential tasks and leaving the rest to the outer order.

It is easy to advise a change of ideas, and difficult to accomplish it. Faith, as it has been the aim of this book to show, must be built up and maintained, and can be, only by life long habits of correct mental and physical hygiene. It must be put into muscles and nerve tissue, maintained by wise control of the energies, by all the resources of science. The individual

must learn to let go that which belongs to the Universe and to give attention to his own work. He must do in a practical way, without too much question, a certain part that lies close at hand for him to do. He must do this loyally, trusting to the reason of the world to do the rest. If one has learned to work thus restfully, with a true sense of the meaning and value of his individuality, he has accomplished the greatest task of self-control. Success and cures can be left, for the most part, to take care of themselves.

Finally, it must be impressed upon all, well or ill, that they can and must live lives complete in all essential parts. To live only at the cost of cutting off parts of life that are most real and full of meaning is not truly living at all. The normal life is a whole life, a balanced whole of certain parts, working together in harmonious relations. A life must fulfil some connected, serious purpose, and yet each day must be made complete in itself.

That such a normal life cannot be had for the asking, can easily be understood. How to live it is a far-reaching problem, doubly hard in our own times, and for thousands a task that often seems impossible. It can be gained only by taking the necessary steps to its possession. If it is obtained in the face of great obstacles, so much greater the achievement. In a general way, as to how the nervous life is to be made a complete life, and according to what principles the personal problem of the individual must be worked out, it is hoped this book has made some helpful suggestions.

#### SUGGESTIONS FOR READING.

The only way in which one can be equipped to judge intelligently the great mass of literature which nowadays passes as philosophy is by serious reading of the best philosophy. This is peculiarly necessary now when so much that pretends to be practical is mixed with false principles. Many systems of health culture pretend to be based upon "metaphysics," but for the most part their philosophy is small and tawdry. The prevalence of such cheap thought is one of the worst features of our intellectual life. Few are trained in philosophy, and the great majority, being totally ignorant of the subject, are susceptible to any metaphysical system that is brought to their attention.

These systems contain nothing at all that is not known in academic thought, and in no particular have they anything to offer, either practical or theoretical, that is not contained in what may be called professional philosophy.

To escape the danger of being carried away by amateur "metaphysics," one must do serious reading; reading which is not easy at the best, and which, to make one really intelligent in philosophy must be carried far. For many, it would be better to attempt no reading of philosophy, for they lack sufficient patience and order; but if philosophy is read at all, it is a choice between hard work and acquiring an easy, but narrow and useless view of the subject.

All the systems of mental healing and the like are based upon thoughts which are contained in what is called technically idealistic philosophy. To understand this fully is out of the question, except for the special student, but anyone can by a season of reading become enough of a philosopher to be proof against the worst at least of the pseudo-philosophy which seems to be rising on every hand.

It is best, if possible, to try to grasp the

thought of some one writer. For such a study, no work can be recommended more highly than that of Professor Josiah Royce. One may begin with the Spirit of Modern Philosophy, then read the Philosophy of Loyalty, and finally the World and the Individual, which is a philosophic system. This is all hard reading, but it is impossible to obtain any insight into philosophy without labour.

There are of course a great number of philosophic books, intended for the beginner. None are easy to understand. One may read Hibben's Problems of Philosophy, or, if one wishes to study somewhat as a college student would approach the subject, he can undertake Professor Calkins' Persistent Problems of Philosophy. The works of Professor A. K. Rogers are also excellent introductions to philosophic views of the world, quite similar in some of their conclusions to the idealism of the pseudo-philosophies, but reasoned soundly, with knowledge of the subject. Münsterberg's Eternal Values may be mentioned as a recent attempt to influence the more intelligent public in the direction of sound philosophy.

If one wishes to do more than comprehend

the spirit of idealism upon which, as has been said, all the new philosophies are based, and would like to enter into the field of controversy, he should attempt such works as the recent books of the late Professor James. When one begins to question for himself the merits of antagonistic views, such as idealism and pragmatism, he enters the field as a serious student of philosophy, and he must expect to work like one if he is to accomplish anything. There is no easy road to philosophy.

THE END

## INDEX

Abnormal individuals, 12. Æsthetic aspects of a day, 64. Air bathing, 89. Alcoholism, 35. Anger, 167. Appetite, 72. Aristotle's theory of tragedy, 164. Autobiographical motive, 24. Auto-suggestion, 191.

Avocation, 142. Bathing, 88; air, 89; cold, 89; oil, 91; sun, 90; warm, 89. Belief, 182. Bernhardt, Sara, 134. Biological laws, 9; modification of, 13. Breathing, 94, 109, 126.

Card-playing, 146. City and country, 3. Clothing, 92. Cold, sense of, 92, 121. Colds, 94. Complete life, 208. Concentration, 175. Confessional method, 163.

Dancing, 147. Darwin, 12.

De-individuation in recreation, 140. Diet, liberality in, 73; plan of, 82; systems of, 70. Differentiation of individuals, 13. Digestion, 75.

Doctors and medicines, 7.

Elements of nervous life, v. Emotions, 153; and nervous life, 153, 155; and individuality, 161; control of, 163, 194; hygiene of, 155; physical hygiene of, 160; psychology of, 156. Energy system, 56. Environment and impulse, conflict of, 39. Exercise, 97; benefits of, 102; dangers of excessive, 103.

Eye-strain, 38. Faith, 206, 207.

Farmers, nervous breakdown among, 101. Fear, 165. Freedom, sense of, 99. Freud, Sigmund, 198. Food, 69; and instinct, 71; and poison, 77; science of, 74.

### INDEX

Games, 104. Golf, 144. Growth periods, 11.

Habit, 62. Häckel, E., 8. Hall, G. Stanley, 170. Heredity, 34, 35. Hunger, 76. Hygiene, books on, 67. Hypnotism, 184.

Ideals, wrong, 29; and selfknowledge, 28.

Ideas, dynamic power of, 183.

Increasing mentality, principle of, 9.

Increasing individuation, principle of, 9.

Individuals, 179, 202; difof, 13; esferentiation trangement of, 19, 162; isolation of, 13; as organisms, 24.

Individuality, loneliness of, 201.

Individuation, 55.

Instinct and food, 71; and reason, 60.

Intellect, 171.

Intensity, craving for, 10.

Interest, 101, 172. Intoxications, 11.

Irritability, 10.

James, William, 212.

Kant, 195.

Liquids, 81.

Meals, arrangement of, 79. Meaning, world as, 205. Meat, 75. Medical literature, 45. Memory, 173.

Mental; ability, 174; disorder, 55; energy, waste of, 177; growth, 172; healing, 197, 196, 179; over-work, 42.

Metaphysics, 210.

Mind, as lawful, 171; -wandering, 175.

Misfortunes as race-service, 15.

Mid-day nap, 123.

Modern ideals, 4.

Moods in recreation, 146,

Morbid introspection, 27.

Motor habits, change of, 97. Movements, fundamental and

accessory, 108. Music, 143, 189. Mysticism, 203.

Nature; and food, 84; fear of, 95.

Nervous children, 51.

Nervous disorders, 37.

Nervous life, causes of, 33; factors of, 48; problems of, v, 6.

New England conscience, 29,

Newspaper, 148.

New thought, 198.

Oil bathing, 91. Optimism and exercise, 103. Optimum day, 60. Optimum life, 57, 59. Over-excitement, 37.

Parent and child, 169.
Personal hygiene, 55.
Personal problem, 5, 20, 65.
Philosophical aspects, 201;
philosophical reading, 202.
Physical culture, 106; systems of, 111.
Physical traits, 27.
Physiology, limitations of, 78.
Play movement, 141.
Principles of control, 53.
Progress, 14; by selection, 12.
Psychological reading, 31.
Psycho-therapy, 180, 197.
Public hygiene, 16.

Reading, 148.
Recreation, 139; as universal experience, 147; vicarious, 146.
Relaxation, 124, 144; mental, 128.
Religious life, 150.
Repression, 41, 154; of interests, 14.
Rest and digestion, 81.
Rogers, A. K., 211.

School conditions, 50. School life, 45. Schopenhauer, 201. Second breath, 134. Sedentary life, 99. Sedentary workers, 115.

Royce, Josiah, 211.

Self-analysis, 193.
Self, historical method of study of, 22.
Self-interest and social inter-

ests, 58.

Self-knowledge, 20, 158, 162; craving for in adolescence, 25.

Self-study, 159, 177; language methods of, 26; science of, 30.

Sensitive type, 41, 48. Sexual life, 11, 42, 168.

Skill, limitations of, 105.

Skin, care of, 87; functions of, 87.

Sleep, 117; in open air, 120; means of producing, 119; out-of-doors, 123.

Sleeping porches, 122.

Sleeplessness, 118; causes of, 119.

Social contact, 148.

Social sense, 53.

Spencer, H., 17.

Stevenson, R. L., 123.

Sub-conscious, 180.

Sugar, 75.

Suggestion, 179, 186; from temperament, 189; methods used in hospitals, 190; from nature, 189; systems of, 202.

Sun bathing, 90. System, 62.

Taste, psychology of, 77. Tension, 40, 55, 127. Toxins, 38.

#### INDEX

Traumatisms, 41. Travel, 149.

Types, motor and sensitive, 98.

Underwear, 92.
Utilisation methods of control of emotion, 163.

Vegetables in diet, 75.

Walking, 105, 145; relaxed, 126.

Work, 129; and breakdowns, 131; and hygiene, 133; and pleasure, 129; and relaxation, 136; as hygienic, 131; as social activity, 133; emotional faults of, 135.

World, the nature of, 203.





# PLEASE DO NOT REMOVE CARDS OR SLIPS FROM THIS POCKET

## UNIVERSITY OF TORONTO LIBRARY

RC Partridge, G. E. (George 351 Everett) P3 The nervous life

BioMed.

